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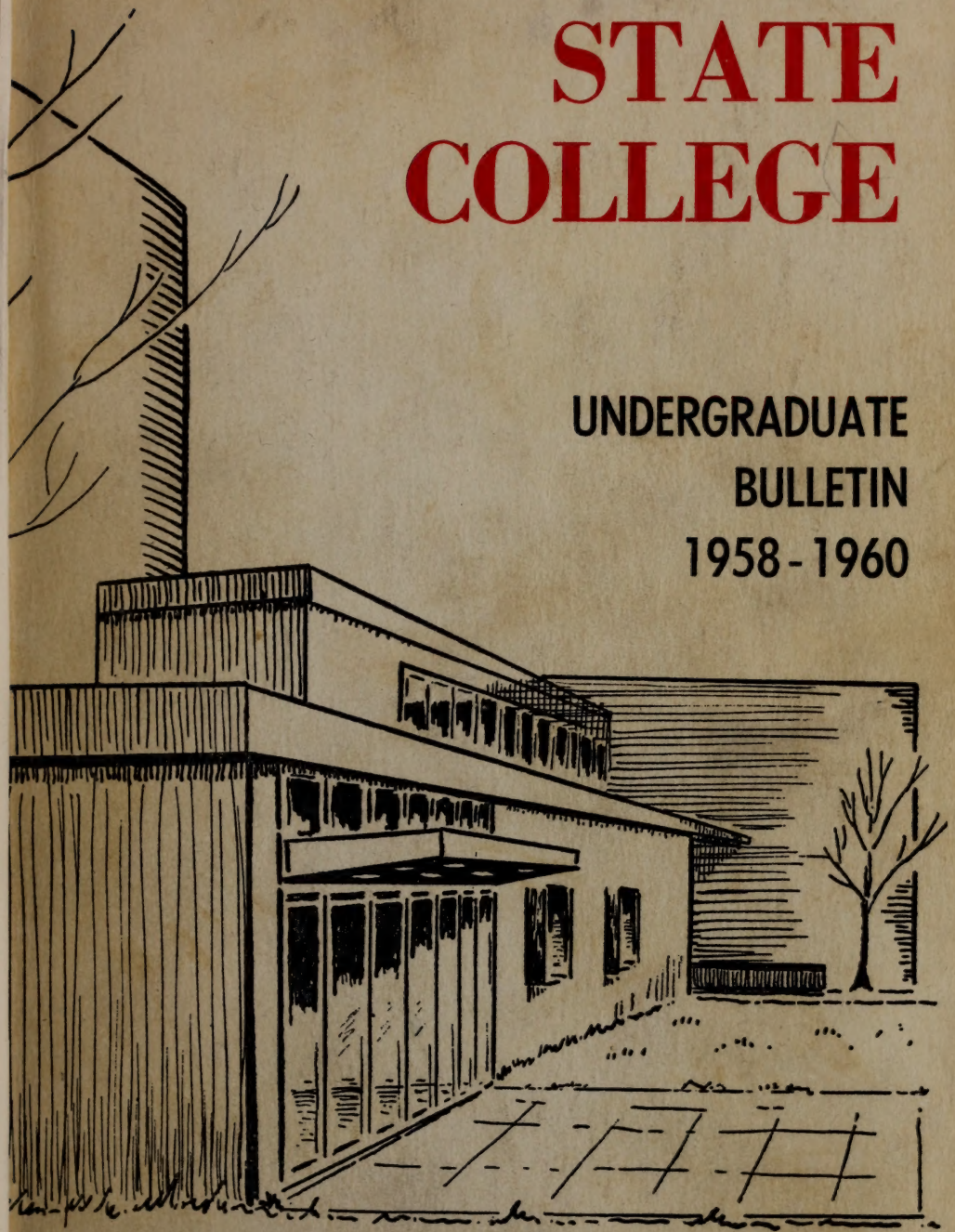
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1958 -

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MONTCLAIR STATE COLLEGE

UNDERGRADUATE
BULLETIN
1958-1960



UPPER MONTCLAIR

NEW JERSEY

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AERIAL VIEW OF CAMPUS

MONTCLAIR STATE COLLEGE

RECREATION LODGE

MEN'S DORMITORY

MEMORIAL AUDITORIUM

STUDENT LIFE

DINING HALL

TEMPORARY MUSIC BUILDING

COLLEGE HIGH SCHOOL

TEMPORARY BUILDING

ADMINISTRATION BUILDING

TEMPORARY BUILDINGS

CHAPIN HALL

NEW WOMEN'S DORMITORY

RUSS HALL

PHYSICAL EDUCATION BUILDING

HEATING PLANT

GARAGES

AMPHITHEATER

FINES INDUSTRIAL ARTS

MATH SCIENCE HOME ECONOMICS

VALLEY ROAD

NORMAL AVE.

FROM NEWARK AND THE ORANGES

TO 54 & ROUTE 1

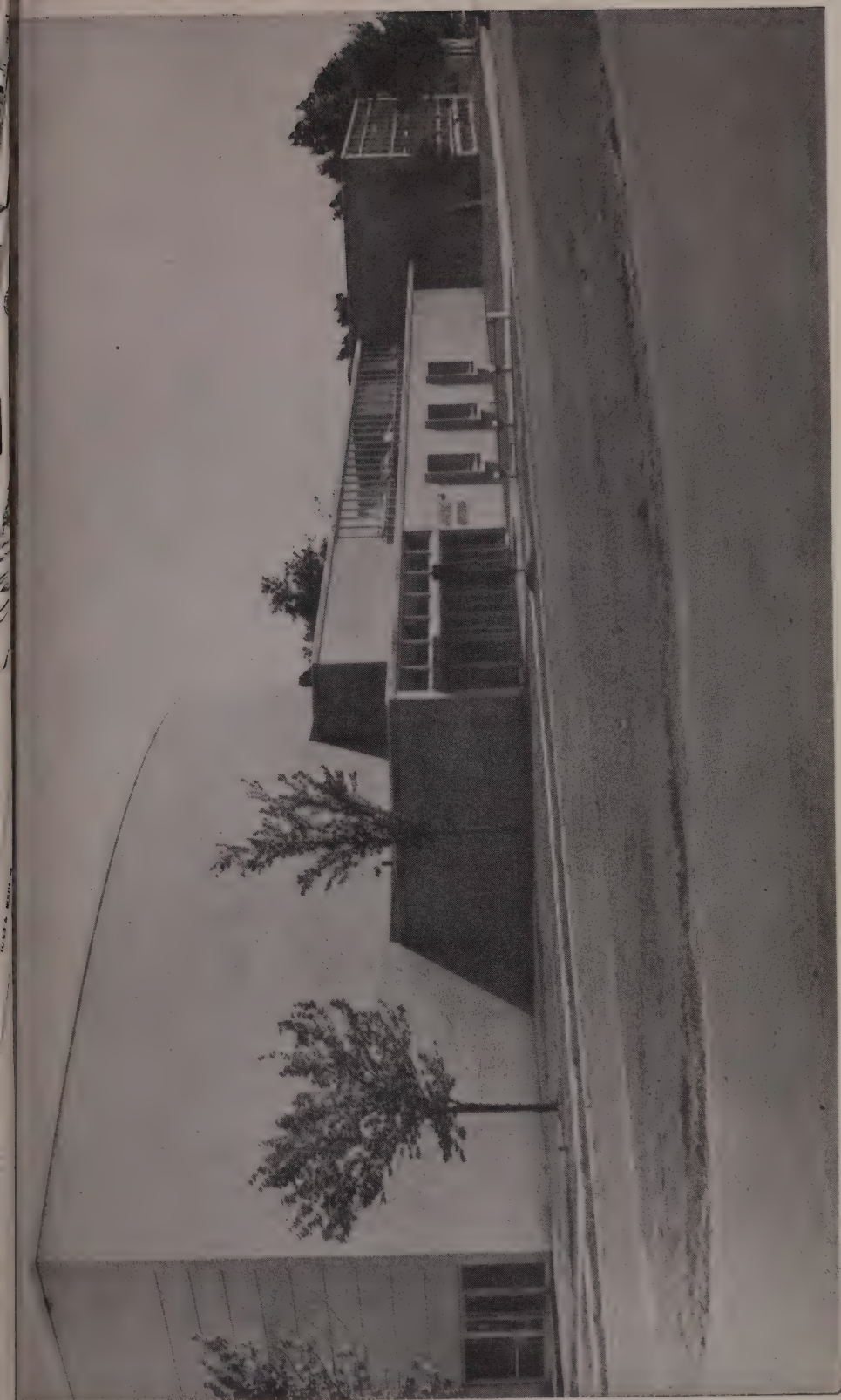
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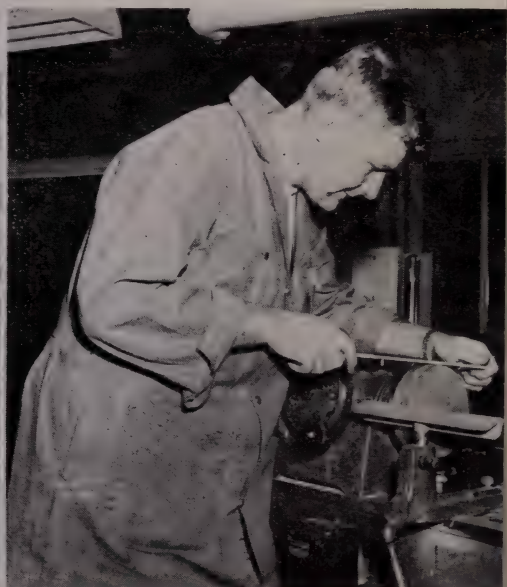
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class



Class Activities Enrich Learning



**Future Mathematicians Check
Alignment of New Buildings**



**Concentration in the
Industrial Arts Laboratories**



Business Practice

Practice on the Field



Checking Practice with the Bo



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1908—1958

FIFTY YEARS OF TEACHER EDUCATION
IN A CHANGING WORLD



Bulletin of Information

AND

Catalog of Courses

1958-1960

MONTCLAIR STATE COLLEGE

MONTCLAIR

NEW JERSEY

VOLUME 51

NUMBER 1

MONTCLAIR STATE COLLEGE

COLLEGE CALENDAR 1958-59

First Semester 1958-59

September 6	Freshman Orientation
September 8	Registration Begins
September 11	Classes Begin
November 26	Thanksgiving Recess begins at close of College day
December 18	Christmas Recess begins at close of College day
January 5	Christmas Recess Ends. Classes resume 8:30 a.m.
January 22	Semester Ends

Second Semester 1959

January 26	Semester Begins
January 29	Classes Begin
March 26	Spring Recess begins at end of College day
April 6	Classes Resume
May 30	No Classes
June 4	Commencement

TABLE OF CONTENTS

Calendar	2	Admission to the Graduate Division	24
State Officials	5	Placement Bureau	25
State Board of Education	5	The Alumni Association	25
Commissioner of Education	5	Number of Graduates	25
Assistant Commissioner for Higher Education	5	Alumni Officers	25
Director of Teacher Education and Certification	5	Administrative Organization	26
College Administration	5	Business Division	26
Health Services	5	Instructional Division	26
Faculty	7	Personnel Division	26
Part-Time Faculty Members in Special Fields	15	Library	26
Library Staff	16	Bureau of Field Studies	27
Business, Dormitory, and Secre- tarial Staff	16	New Jersey State School of Conser- vation	27
PART I—GENERAL INFORMATION	17	The Graduate Division	28
General Objective	17	Offerings for Teachers-in-Service ...	29
Fundamental Principles and Policies	17	Part-Time and Extension Courses	29
History	18	Summer Session	29
Professional and Academic Status ...	19	The Laboratory School	30
Location	19	PART II—STUDENT PERSON- NEL AND ACTIVITIES	31
Grounds and Buildings	19	Student Interests and Activities	31
Expenses	20	Orientation and Guidance of Freshmen	31
General Expenses for Regular College Year	20	General Citizenship	31
Living Expenses for Regular Year	21	Student Government Association	31
Scholarships and Loans	21	Music and Art	32
Student Supply Store	21	Dramatics	33
Food Service	21	Assembly Programs	33
Gifts	21	Student Exchange with French and Spanish-Speaking Coun- tries	33
Admissions	22	College Athletics	34
Admission to the Freshman Class	22	Publications	34
Requirements for Admission	22	Dormitory Life	35
High School Prerequisites for College Majors and Minors	24	Student Personnel Services	35
Admission to the Sophomore, Junior, or Senior Class	24	Physical Health	35
		Mental Health	36
		College Social Activities	36
		Scholastic Adjustments	37
		Financial Adjustments	37
		State Scholarships	37

Work Scholarship Funds	37	Student-Teaching	53
Edward Russ Scholarship Fund ..	37	Supervision of Student-Teaching ..	53
Chapin Memorial Fund	38	Placement and Professional Ad- justment Service	54
Scholarships	38	The First Year	54
John C. Stone Scholarship	38	The Second Year	55
Margaret B. Holz Fund for Stu- dent Exchange	38	The Third Year	55
Field Studies Fund	38	The Fourth Year	56
Clarence O. S. Howe Memorial Organ Fund	38	Other Courses in Education	57
Student Employment	38	Elementary Education Courses	64
Veterans	39	Professional Subject-Matter Courses	66
Parking	39	Fields of Specialization	66
PART III—THE COLLEGE CUR- RICULA	40	The Department of Business Edu- cation	67
Fundamental Principles	40	The Department of English	78
General Organization of Instruc- tion	41	The Department of Speech	86
Relations to the Schools of the State	41	The Speech Minor	88
Fields of Instruction	41	The Department of Fine Arts	94
Professional-Cultural Background ..	41	The Department of Foreign Languages	101
Professional Subject-Matter	42	Beginning Languages	103
Department of Professional Edu- cation	42	French	103
Summary of Course Requirements for the Bachelor of Arts Degree ..	43	Latin	107
The Laboratory School	44	Spanish	110
The College High School	44	Language	114
Credits and Standards	44	German	115
Credits	44	The Department of Home Eco- nomics	116
Rating System	44	The Department of Industrial Arts ..	123
Degree and Certificate	45	The Department of Mathematics ...	128
Scholastic Honors	45	The Department of Music	137
Requirements for Graduation and Bachelor of Arts Degree	45	Panzer School of Physical Educa- tion and Hygiene	156
Scholastic Standards	46	The Department of Science	162
Professional Background Courses ...	46	The Department of the Social Studies	178
Group I. Social Studies	47	The Department of Geography	203
Group II. Humanities	48		
Group III. Science	49		
Group IV. Mathematics	50		
The Department of Professional Education	51		
Organization and Activities	52		

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City College of New York, New York City, B.B.A., M.B.A.; Teachers College, Columbia University, New York City, Ed.D.

NED S. SCHROM, Ed.D.

Dean of Students

University of Missouri, Columbia, Missouri, B.S. in Ed., M.Ed., Ed.D.

JOHN A. SCHUMAKER, A.M.

Assistant Professor of Mathematics

University of Illinois, Urbana, Illinois, B.S., A.M.

JEROME M. SEIDMAN, Ph.D.

Assistant Professor of Psychology and Education

Rutgers University, New Brunswick, N.J., B.S., M.S.; New York University, New York City, Ph.D.

THADDEUS J. SHEFT, A.M.

*Assistant Professor of Audio-Visual Education and Associate Coordinator,
Audio-Visual Center*

State Teachers College, Montclair, N.J., A.B., A.M.

HORACE JONES SHEPPARD, A.M.

Associate Professor of Business Education

Bucknell University, Lewisburg, Pennsylvania, A.B.; New York University, New York City, A.M.

MARGARET A. SHERWIN, A.M.

Assistant Professor of Education and Assistant Director of Students

Teachers College, Columbia University, New York City, B.S., A.M.

KENNETH ORVILLE SMITH, Ph.D.

Professor of Physics

Cornell College, Mt. Vernon, Iowa, A.B.; University of Illinois, Urbana, Illinois, A.M., Ph.D.

MAX A. SOBEL, Ph.D.

Associate Professor of Mathematics

State Teachers College, Montclair, N.J., A.B.; Columbia University, New York City, A.M., Ph.D.

PETER P. STAPAY, Ed.M.

Registrar

Rider College, Trenton, N.J., B.C.S.; Rutgers University, New Brunswick, N.J., Ed.M.

ALICE G. STEWART, A.M.

Assistant Professor of Social Studies

University of California, Berkeley, California, A.B.; Teachers College, Columbia University, New York City, A.M.

VALENTINE TONONE, A.M.

Assistant Professor of French

Brevet Supérieur, Ecole Normale, Grenoble, France; Butler University, Indianapolis, Indiana, A.B.

CHARLES E. TRESSLER, A.M.

Assistant Professor of Industrial Arts

State Teachers College, Millersville, Pennsylvania, B.S.; New York University, New York City, A.M.

ELIZABETH T. VAN DERVEER, Ed.D.

Associate Professor of Business Education

State Teachers College, Trenton, N.J., B.S.; New York University, New York City, A.M., Ed.D.

RALPH A. VERNACCHIA, A.M.

Assistant Professor of Fine Arts

New York University, New York City; San Diego State College, San Diego, California, A.B.; Teachers College, Columbia University, New York City, A.M.

HAZEL M. WACKER, A.M.

Associate Professor of Physical Education and Health Education

Panzer College of Physical Education and Hygiene, East Orange, N.J., B.P.E.; State Teachers College, Upper Montclair, N.J., A.M.

RALPH WALTER, Ed.D.

Professor of Psychology and Education

Wesleyan University, Middletown, Connecticut, A.B.; Harvard Graduate School of Education, Cambridge, Massachusetts, Ed.M., Ed.D.

RICHARD W. WILLING, Ed.D.

Associate Professor of Business Education and Assistant Director of Students

University of Wisconsin, Madison, Wisconsin, A.B.; State Teachers College, Whitewater, Wisconsin, B.E.; University of Wisconsin, Madison, Wisconsin, A.M.; New York University, New York City, Ed.D.

RAYMOND W. YAGIELLO, M.Ed.

Assistant Professor of Physical Education

Catawba College, Salisbury, N.C., A.B.; University of North Carolina, Chapel Hill, N.C., M.Ed.

FREDERIC HAROLD YOUNG, Ph.D.

Associate Professor of English and Education

Bates College, Lewiston, Maine, A.B.; Harvard University Divinity School, Cambridge, Massachusetts, S.T.B.; Columbia University, New York City, Ph.D.

LOUIS E. ZERBE, M.Mus.

Associate Professor of Music

American Conservatory of Music, Chicago, Illinois, B.Mus.; Kansas Wesleyan University, Salina, Kansas, A.B.; Jordan Conservatory of Music, Indianapolis, Indiana, M.Mus.

Part-Time Faculty Members in Special Fields

CATHERINE C. BURTON, B.Mus.

Assistant Professor of Music

Boston University, Boston, Massachusetts, B.Mus.

ARTHUR HENRY CHRISTMANN, S.M.D.

Assistant Professor of Music

Teachers College, Columbia University, New York City, B.S., A.M.; School of Sacred Music, Union Theological Seminary, New York City, Sac. Mus. Doc.

RUSSELL HAYTON, M. SAC. M.

Assistant Professor of Music

Chicago Conservatory, Chicago, Illinois, B.Mus.; Roosevelt College, Chicago, Illinois, B.Mus. in Ed.; Union Theological Seminary, New York City, M. Sac. M.

HELENE S. ROSS, B.S. in Ed.

Assistant Professor of Fine Arts

Stella Elkins Tyler School of Fine Arts, Temple University, Melrose Park, Philadelphia, Pennsylvania, B.F.A., B.S. in Ed.

B. ERNEST SHORE, A.M.

Assistant Professor of Slavic Languages and Culture

McMaster University, Hamilton, Canada, A.B.; Harvard University, Cambridge, Massachusetts, A.M.

Library Staff

ANNE BANKS CRIDLEBAUGH, A.M.

Librarian and Associate Professor of English

Woman's College, University of North Carolina, Chapel Hill, N.C., A.B.; School of Library Service, Columbia University, New York City, B.S.; State Teachers College, Montclair, N.J., A.M.

CLAIRE M. MERLEHAN, A.M.

Reference Librarian and Assistant Professor of English

State Normal School, Montclair, N.J.; New York University, New York City, B.S.; Teachers College, Columbia University, New York City, A.M.; Syracuse University, Syracuse, N.Y., M.S.

Business, Dormitory, and Secretarial Staff

BERNARD SIEGEL, M.B.A.	Business Manager
HENRY STEINER	Assistant Business Manager
OTTO CORDES, P.E.	Superintendent of Buildings and Grounds
ETHEL L. BLODGETT, B.S.	Food Supervisor
RUTH D. FREEMAN	Recorder
ALICE I. REASKE, A.B.	Administrative Secretary
FRANCES VINAL, A.B.	Secretary, Staff Personnel
CATHERINE H. STITT	Secretary to the Dean of the College
ELIZABETH BRINER	Secretary, Dean of Students
ESTHER B. SPENGEMAN, A.B.	Secretary, Education Department
MARIE SMITH	Secretary, Director of Admissions
ROSE METZ	Secretary, Graduate Division and Office of Part-Time and Extension
ELIZABETH PETTEGROVE	Secretary, College High School
JOAN MARX	Secretary, Economic Education Center
MARGARET MOSTICA	Secretary, Bureau of Field Studies
HELEN MEURY	Switchboard Receptionist
ROBERT R. BECKWITH	Director, Men's Dormitory
JANICE BLANTON	Director, Women's Dormitory
RITA EDWARDS	Director, Women's Dormitory
IRENE FENNON	Dining Room Supervisor
ALICE PRANIS	Dining Room Supervisor

Faculty-Student Cooperative, Inc.

B. ERNEST SHORE, A.M.	Manager, Faculty Student Cooperative
ELSIE MABEE	Manager, College Snack Bar
HARRIET QUINLAN	Manager, College Book Store
MICHAEL ZUZOV, B.S.	Assistant Manager, Faculty Student Cooperative

Secretarial and Clerical Assistants

MARY S. CONWAY	Secretary, Personnel Division
LETITIA MOORE	Secretary, Personnel Division
FRANCES R. SMITH	Secretary, Registrar's Office
FRANCES C. STEINER	Secretary, Registrar's Office
NANCY BURGUM	Secretary, Registrar's Office
HELEN BARKER	Bookkeeper, Student Accounts, Business Office
BERNICE BUCCERI	Bookkeeper, Appropriations, Business Office
NICHOLAS GUARINO	Bookkeeper, Revenues, Business Office
JOAN MICKS	Secretary, Business Office
SELMA HARRIS	Junior Library Assistant
ESTELLE MARSAND	Secretary, Home Economics Department
MARY L. RUSSO	Typist, Library

Part 1

GENERAL INFORMATION

GENERAL OBJECTIVE

The general aim of the College is the same as that for all education in a democracy—the preparation of youth for a constructive and profitable life in society. This general citizenship aim is fundamental to the course of study and the method of teaching.

The Montclair State College is a professional school which prepares teachers for the junior and senior high schools, and, in certain specialized fields, for the elementary schools of the State. This definite objective has been the controlling factor in the development of the curricula, teaching procedures, extra-curricular activities, and the college spirit and has tended to unify all activities—professional, cultural, and social.

The College is organized for those who have a sincere interest in promoting the general welfare of society through the medium of the public schools of the State. Those who have the natural ability to become friends, guides, and leaders of youth should consider the opportunities offered by the profession of teaching.

FUNDAMENTAL PRINCIPLES AND POLICIES

The following principles control the organization and development of the College. The second statement of each principle is somewhat explanatory of the first and in most cases is addressed particularly to students.

- (1) The College should have clearly defined objectives which should limit and control its offerings and activities.
Entering students should understand what the College has to offer in relation to their interest and purposes.
- (2) The College should be so organized and administered as to promote the interests and welfare of prospective workers in the profession.
The students should be offered the most desirable opportunities for the promotion of their educational interests and success, their physical health and energy, their emotional adjustments and stability, and their social attitudes and habits.
- (3) To teach should be a privilege and not a right, i.e., candidates for teacher preparation should be selected.
The students who are to be privileged to prepare for teaching must demonstrate their intellectual, personal, and scholastic fitness for the profession.
- (4) The relative value of the curricular materials used in a teachers college should be judged by the nature and needs of the schools and communities which it serves.
Though teachers are exponents of broad culture, yet the selection of the necessary materials for a prospective teacher must be made on the basis of professional service.

- (5) Teacher preparation should be differentiated and specialized in accordance with the aims and organization of schools to be served.
The differentiated program at Montclair provides for the training of junior and senior high school teachers and in some specializations for teachers of elementary schools. Specialization within this program is offered in English, foreign languages, mathematics, science, social studies, administration and guidance, business education, geography, music, physical education, speech, fine arts, industrial arts, and home economics.
- (6) Prospective teachers should acquire a rich background of general culture including a knowledge of present-day problems.
The professional-cultural background studies offer a broad human interest in the social, political, economic, industrial, religious, scientific, literary, and aesthetic phases of life.
- (7) Professional scholarship should be sound.
Professional scholarship refers particularly to the scholarship required in the student's major field of specialization. Each student is required to complete approximately thirty-three semester-hours in his major field of interest.
- (8) Prospective teachers should not only acquire a teaching knowledge of subject-matter but also a teaching knowledge of pupils involving the theories and techniques in their instruction.
The professional objectives provide students with a motive for learning which in turn insists upon functional knowledge. The adjustment of this knowledge to the aptitudes and needs of pupils requires methods and skills in instruction.
- (9) The program of studies and activities should be progressive, sequential, and integrated.
Education is confronted with the problem of bringing isolated courses back into their natural relationships or into a unified body of knowledge in order to promote broader understanding, clearer meanings, and balanced judgment.
- (10) The College should seek persistently to maintain high standards of excellence together with practical concepts of usefulness.
Students must give their best efforts, maintain high standards of scholarship, and demonstrate ability to use their knowledge and skills.
- (11) Open-mindedness on the part of all participants in teacher preparation should be encouraged in order to facilitate individual adjustments and growth.
A student's experience in college stimulates intellectual curiosity along with an interest in truth. Such attitudes promote a recognition and understanding of differences and an ability to adjust and grow in a changing world.

History

In 1903 the State Board of Education recommended that a Normal School be established in the northern part of the State of New Jersey. The following year the Legislature purchased a site of twenty-five acres in Upper Montclair. The main building, College Hall, was completed in 1908, and the first class was admitted in September of that year.

Seven years later Edward Russ Hall was built with the bequest of the Honorable Edward Russ, who at the time of his death was a member of the State Board of Education and chairman of the Normal School Committee. Other buildings were added to the campus in 1928 and 1929.

Additional land, lying to the north of the main campus, was purchased in 1927 and 1929, bringing the total area to seventy acres.

On May 27, 1927, the State Board of Education passed resolutions as recommended by the State Department of Public Instruction establishing the State Teachers College at Montclair for the education of teachers for the secondary schools. The first class was graduated from the four-year college curriculum in June, 1930.

Extension courses were added to the teachers college program in 1929. The summer session was established in 1930. Late in the spring of 1932 the State Board of Education voted that the College should offer graduate courses and grant a Master's degree.

In the spring of 1958 the State Board of Education approved the consolidation of Panzer College of Physical Education and Hygiene with the Montclair State Teachers College. In the same action the Board established the Panzer School of Physical Education and Hygiene of the New Jersey State Teachers College at Montclair with a major in this field.

As of July 1, 1958, the College's official name became the Montclair State College.

Professional and Academic Status

The Montclair State College is a fully accredited member of the National Council for the Accreditation of Teacher Education, the Middle States Association of Colleges and Secondary Schools, and the American Association of University Women. Credits are exchangeable among colleges and universities which are members of the above regional and national associations.

Location

The College is located in Upper Montclair about three miles from Montclair Center. The town of Montclair and the college campus are located on the east side of Watchung mountain, which extends from north to south. From this elevation the campus commands a view of unusual interest and beauty. The city of New York, which is about twelve miles to the east, forms the background of the campus view. In the foreground may be seen the gardens, towns, and cities of Bergen, Hudson, Essex, and Passaic counties. The view is impressive by night when one sees the myriad lights of this metropolitan section.

The College campus may be reached by the Lackawanna Railroad to Montclair, and then by bus to the southeast entrance; by the Erie Railroad to the Montclair Heights Station, which is near the south entrance; and also by direct bus lines from New York, Newark, the Oranges, and Paterson.

Grounds and Buildings

The College is located on a wooded campus of seventy acres. Most of the campus is comprised of high ground which overlooks the valley to the east. The campus is developed with lawns, roadways, parking areas, and athletic

fields. An outdoor amphitheater has a seating capacity of 2,000.

The College now has the following facilities, some of which were completed from the fifteen-million dollar bond issue of 1951.

College Hall which contains the administrative offices, the Library, the Audio-Visual Aids Center, and numerous classrooms and faculty offices.

Charles Finley Hall which houses the Fine Arts, Home Economics, Industrial Arts, Science, and Mathematics Departments.

The Student Life Building which contains a cafeteria, student offices, bookstore, recreation rooms, student lounges, the Alumni Lounge and Office, the Memorial Auditorium, and the Speech Department offices and classrooms. The Auditorium contains a pipe organ of 3,500 pipes.

The Physical Education Building which contains three large gymnasiums and other teaching areas and facilities for men and women.

The demonstration high school with small auditorium, gymnasium, library, home economics room and classrooms.

Three dormitories, two for women and one for men, each of which houses approximately one hundred students—Each of these dormitories has a spacious lounge and additional recreational and social facilities, plus laundry facilities, storage rooms, and offices.

A recreation building with fireplaces and a kitchen provides a meeting place for clubs and other student groups.

A large athletic field adjacent to the gymnasium includes a football field, baseball diamond, and running track.

In addition to the permanent buildings listed above, there are four temporary buildings containing classrooms and laboratories and faculty offices.

Expenses

General Expenses for Regular College Year of approximately 37 weeks

The tuition fee for residents of the State of New Jersey is \$150 a year.

The tuition fee for non-residents is \$13 per semester-hour of credit.

The Student Government Association fee is \$36 a year.

The general service charge for music, fine arts, industrial arts, and home economics majors is \$12.50 per semester.

The general service charge for all other students is \$10 per semester.

The student teaching fee for all undergraduates is \$7.50 per semester.

Special fees in connection with senior graduation activities are determined by a senior committee each year prior to Commencement.

The tuition fee is payable in two installments, \$75.00 in September and \$75.00 in January. The student fees and services charges are also payable in two installments, one-half in September and one-half in January.

These charges are subject to revision.

Living Expenses for Regular Year

The charge for board and room in dormitories is \$425.50 for the academic college year. This charge includes a room in the dormitory; breakfast and dinner from Monday through Friday; and breakfast, lunch, and dinner on week ends. The student is required to purchase for cash the luncheon meal from Monday through Friday inclusive. Quarterly payments are due and payable for the charge for board and room exclusive of the luncheon meal Monday through Friday as follows:

\$106.50 on or before registration in September.

\$106.50 on or before November 1.

\$106.50 on or before registration in February.

\$106.00 on or before April 1.

It is essential that these charges be met on the dates specified; otherwise, forfeiture of dormitory privileges may result.

Women students who plan to live in dormitories should consult the Assistant in Student Personnel for Women or make written application. Men students should make application to the Dean of Students for housing accommodations. If at any time dormitory accommodations are not available, lists of approved accommodations in private homes will be provided. When dormitory vacancies occur, it is understood that students living in private homes will transfer to fill such vacancies.

Scholarships and Loans

See Financial Adjustments, Page 37.

Student Supply Store

The store aims to supply such books and materials as are in continual demand by the student body and faculty.

Food Service

Excellent food at reasonable prices is served on campus. The new cafeteria serves hot lunches during the noon hours. Sandwiches and light refreshments are available in the Snack Bar throughout the day. Dormitory students and those who live off campus and wish to board at the College are served breakfast and dinner in the cafeteria.

Gifts

The College has been fortunate in receiving many gifts which help to enrich student life on the campus. Alumni, faculty, students, and friends raised upwards of two hundred thousand dollars to help construct and equip the new Student Life Building. An excellent pipe organ in the Memorial Auditorium is the result of private subscriptions. Another fund in honor of

Dr. Chapin, the first president of the College, provides loans to students in financial need.

Many other gifts have been presented by classes, graduates, and friends. These are now serving a variety of purposes on the campus.

Admissions

Admission requirements are arranged for three groups of students: those entering the freshman class; those entering with advanced undergraduate credits; and those entering the Graduate Division.

I. ADMISSION TO THE FRESHMAN CLASS

Students who are undecided as to whether they should enter the teaching profession are invited to come to the College for personal interviews. All candidates for the freshman class should file their applications with the Director of Admissions before February 1st of the year in which they wish to take the entrance examinations.

A. Requirements for Admission as adopted by the State Board of Education.

1. *Admission without Entrance Examination for Outstanding Students*

Students who at the end of the eleventh grade are in the upper one-fourth of their high-school class, and who successfully fulfill the other requirements for admission listed in the catalog will be admitted without written entrance examination. Maintenance of a high scholastic record during the senior year would be expected.

State scholarships are awarded on the basis of the entrance examinations specified below. It is necessary for *all* students who need financial assistance and who wish to apply for one of these scholarships, (including superior students admitted without written examination) to take one of the entrance examinations listed below, in order to enter the scholarship competition.

2. *Entrance Examinations*

Applicants for admission to the freshman class not in the upper quarter of their class as specified above, shall take either the State College entrance examination prepared under the direction of the Commissioner of Education or the Scholastic Aptitude Test of the College Entrance Examination Board. Application for the latter should be made direct to the College Entrance Examination Board, P.O. Box 592, Princeton, New Jersey, at least six weeks before the desired test date. Results of the Scholastic Aptitude Test should be in the Admissions Office by March 1.

3. *Eligibility for Admission*

To be eligible for admission an applicant shall furnish the following credentials on the appropriate forms obtained from the Office of the Director of Admissions:

a. Age certification

A statement of date of birth. Applicants shall be at least fifteen years nine months old before taking the entrance examinations.

b. Health report

A report from the family physician concerning the student's condition of health. This report shall be made on a form furnished by the College.

c. Testimonial of character

A testimonial of good moral character from responsible persons not related by blood or marriage to the applicant on a form furnished by the College.

d. High School rating

A rating of the student's character and probable fitness to succeed in college courses. This rating shall be made by the officials of the applicant's secondary school on a form furnished by the College.

e. Certificate of graduation

A certificate showing graduation from the twelfth grade of an approved secondary school or showing that the applicant is scheduled for graduation during the current scholastic year. The units to be accepted for admission to the College are prescribed by the Commissioner of Education as follows:

	<i>Units</i>
English	4
Mathematics*	1
American History and Problems of Democracy	2
Science	1
Foreign Language	2
Additional Social Studies, Science, Language, or Mathematics	3
Free Electives	2
<hr/>	
Total	15

(1) Upon recommendation of the high school principal concerned substitutions for the units listed above may be made for an applicant who is in the highest quarter of his graduating class. When a request for a substitution of this kind is made, it will be considered by a special committee consisting of the head of the major department concerned, the Director of Admissions, and the Dean of the College. If the above named committee recommends that a substitution be made, the recommendation will be referred to the President of the College for a final decision.

(2) Candidates for the Business Education, Fine Arts, Home Economics, Industrial Arts, and Physical Education Curricula may substitute two units of work in these subjects for the Language entrance requirement.

f. Filing official transcripts of graduation

Applicants who have not filed an official and complete transcript showing graduation from high school before the date of the entrance examinations shall do so before registration in the College.

4. Physical Examination

At entrance all candidates must be examined by a physician selected by the College to determine whether they are free from any disease or infirmity which would unfit them for teaching; and an examination by this physician may be required of any student at any time in his course, to determine whether his physical condition warrants his continuance in the College. The State also requires all students to submit evidence each year of freedom from tuberculosis. The College endeavors to provide suitable tests each year for the student at a minimum of expense.

5. Speech Entrance Test

Each candidate for the freshman class and all students seeking admission with advanced standing will take a speech entrance test. Candidates with serious difficulties may be refused admission, or admitted conditionally.

* Business mathematics will not satisfy the mathematics requirement. General mathematics is acceptable only when accompanied by a letter to the Director of Admissions from the high-school principal certifying that the course content includes excerpts from algebra, plane geometry, and trigonometry.

B. High School Prerequisites for College Majors and Minors.

The major and minor fields of interest that are offered students by the College are discussed under College Curricula (Page 40 and following). The College recommends that students include in their high school credits at entrance the number of units indicated in the following table for the subjects in which they intend to specialize:

<i>Majors</i>	High School Units Recommended
Business Education	2
English	4
Fine Arts	2
French, Latin, or Spanish	2 to 4
Home Economics	2
Industrial Arts	2
Mathematics	3½ to 4
Music	1 to 2
Physical Education	1
Science	1 to 3
Social Studies	2 to 3
Speech	1 to 2
Speech	(if possible) 1 to 2
<i>Minors</i>	High School Units Recommended
Accounting and Business Practice	1
Biology	1
English	4
French, German, Latin, or Spanish	2 to 4
Geography	1
History	2 to 3
Mathematics	3 to 4
Music	1
Physical Education	1
Physical Science	1 to 2
Political Science and Economics	2 to 3
Secretarial Studies	1
Social Business	1
Speech	1
Speech	(if possible) 1

II. ADMISSION TO THE SOPHOMORE, JUNIOR, OR SENIOR CLASS

A limited number of students may be admitted with advanced standing. To be eligible, a candidate must have had at least a year of college work. The acceptance of such a candidate is dependent upon his scholarship, as evidenced by the credentials submitted, personal fitness, and the possible number of vacancies in the class for which he is eligible. Definite acceptance of candidates for advanced standing cannot be made long in advance for any given semester. Students wishing to apply for admission on advanced standing should write for the necessary form of application to the Director of Admissions, Montclair State College, Upper Montclair, New Jersey, no later than December 15th for Spring-Semester admission and July 15th for Fall-Semester admission.

III. ADMISSION TO THE GRADUATE DIVISION

Application blanks for admission to graduate work may be secured from the Chairman of the Graduate Council.

Official transcripts of all undergraduate work must accompany the written application. No action is taken until such transcripts are received.

Upon receipt of the application blank and the transcripts of undergraduate work, the student is asked to have personal conferences with the department adviser of the department in which he wishes to major, and with the Chairman of the Graduate Council. These conferences are a prerequisite to the action of the committee on admission. The student is notified in writing as to whether or not he has been accepted.

While the applicant for matriculation for the Master's degree must be a graduate of an accredited college or university, senior students currently enrolled in the College who have good academic records and who are within sixteen semester-hours of graduation may be permitted to take up to eight semester-hours of graduate work concurrently with the balance of their A.B. degree requirements and prior to graduation. Such students must have written permission signed by the head of the department concerned, the Dean of the College, and the Chairman of the Graduate Council.

For more complete information see the *Graduate Bulletin*.

Placement Bureau

See the Department of Education, Page 51.

The Alumni Association

All graduates of Montclair are members of the Alumni Association and active members if they pay dues. Association officers, the Executive Board, and faculty members of the College, plan yearly the schedule of events to which all graduates and their guests are invited. The alumni publication is mailed to each graduate several times a year, telling of activities of the College, the faculty, and the alumni.

The Association strives to establish and continue lasting friendships and contacts of both social and professional natures among its members and between graduates and the College.

NUMBER OF GRADUATES

Normal School Diplomas—3,921

A.B. Degrees—5,759

A.M. Degrees—1,901

ALUMNI OFFICERS, 1958-59

<i>President</i>	RICHARD T. DUGAN, '40
<i>Vice-President</i>	MORRIS G. MCGEE, '49
<i>Recording Secretary</i>	IRWIN GAWLEY, '49
<i>Treasurer</i>	RICHARD E. ONOREVALE, '52
<i>Assistant Treasurer</i>	JOHN KORLEY, '50
<i>Executive Secretary</i>	DOROTHY BRYAN GARLAND

ADMINISTRATIVE ORGANIZATION

The College is organized for administrative purposes into three divisions: business administration, instructional administration, and personnel administration. These divisions are under the direction of the President of the College and the Administrative Council in cooperation with the faculty.

Business Division

The business division has charge of financial matters such as appropriations, receipts, expenditures, inventories, audits, and reports. This division also superintends buildings and grounds, and food-service operations.

Tuition and fees are paid at the Business Office.

Instructional Division

The Dean of the College has direct supervision over the instructional division of the College. The Dean is assisted by department chairmen, the Registrar, librarians, and committees in considering matters related to instruction. This division is concerned with curriculums, instructional facilities, teaching aids, assignment of staff and class rooms, and all matters related to the instructional program of the College.

Personnel Division

The personnel division has the responsibility of providing for the physical health, mental health, study habits, and social life of all students. The Dean of Students is the head of the personnel division. He is assisted in his responsibilities by assistant directors of personnel for men and women, the college physician, college nurses, dormitory directors, psychiatric consultant, and faculty members who have specific assignments as advisors to student groups or individual students.

LIBRARY

Conveniently located on the main floor of College Hall is the library of 68,000 volumes with a spacious reading and reference room and three smaller reading rooms housing the music collections, the curriculum laboratory, the textbook exhibit, the art library, and special collections. Special collections include the Howe collection of organ music; the Mark Andrews music library; the Webster Memorial collection of modern poetry, including many first editions and autographed copies; the Finley collection of science textbooks, which has been augmented by early textbooks of historical significance from other sources; the Carnegie Secondary Art set of books and pictures; a collection of New Jerseyana; and a recent outstanding gift, the Roy W. Hatch collection of Lincolnia. Of special interest is the China Institute Library of more than 400 titles, a permanent loan from the China Institute of New Jersey. The textbook collection of 5,800 volumes includes the most recent textbooks in all subjects on both the elementary and secondary level and curricula from the majority of communities and counties of New

Jersey as well as outstanding curricula from other states. The library also maintains a complete file of bulletins of the U.S. Office of Education for which the library is designated as an official depository library in the area. An up-to-date and widely-used file of pamphlets, maps, and pictures, classified by subject, is available to all students.

An annex to the Library of the "old gymnasium" on the same floor as the main Library is being used as a special reading room.

In keeping with the policy of the College as a whole, the field of education is especially complete, and at the same time the subject-matter fields are all well covered on both the graduate and the undergraduate level with a well-rounded collection, including an outstanding group of books, portfolios, and reproductions of modern art. Reading for fun and enjoyment is stimulated by the constantly changing group of "Recent Books" conveniently located in the library foyer.

All of the books, including the reference collection, are on open shelves to which the students, as well as faculty, graduates, and teachers-in-service, have access and borrowing privileges. This open-shelf policy applies even to the periodical collection which consists of back issues of all but the most ephemeral of the 320 currently received periodicals. Bound volumes of magazines total over 2,800. Those prior to 1950 are housed in the Library Annex.

Supplementing the College library is the library of the College High School which is a large, pleasant room housing 4,600 volumes and located in the College High School. These books are catalogued at the College library and are available through the main catalog as well as through the catalog of the College High School. The High School Librarian works in close cooperation with the members of the College library staff, particularly in the field of literature for adolescents, in which an extensive and up-to-date collection is maintained.

BUREAU OF FIELD STUDIES

The Bureau of Field Studies offers thirteen educational travel courses covering all parts of the United States. They are described in various sections of this bulletin, and more details are given in bulletins published from time to time. Social Studies 302, *Field Studies in Urban Life*, is required of the social studies majors in their junior year. The other field studies courses are elective.

NEW JERSEY STATE SCHOOL OF CONSERVATION

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Courses offered include field studies in biological and physical sciences, conservation of forests and wild life, conservation of soils

and water, arts and crafts, field science for elementary teachers, water safety and first aid, camping education, rural sociology, and related subjects.

The facilities at Lake Wapalanne are unusually good. The camp buildings were constructed by the Civilian Conservation Corps and include a dining hall, an infirmary, an administration building, an assembly-recreation-library building, a staff lodge, bath-houses, latrines, and twelve living cabins.

Descriptions of course offerings at the New Jersey State School of Conservation are contained in special announcements which may be had from the Montclair State College.

THE GRADUATE DIVISION

Graduate courses were first offered at the Montclair State College in the summer term of 1932 and have been offered in all regular and summer sessions since. In order that the work may be available to teachers and administrators in service, the courses are scheduled during the academic year in the late afternoons, evenings, and on Saturdays. The courses are given by the members of the college staff and are granted residence credit; thus, it is possible for teachers-in-service to earn a Master's degree without taking a leave of absence from their teaching positions. That the College is advantageously located for such work is shown by the fact that the majority of the high-school teachers of the State are within a radius of twenty-five miles of the campus.

From the time graduate courses were instituted there has been an enthusiastic response to the work. There are now more than six hundred students matriculated for the graduate degree. Among the institutions of higher learning from which these matriculants come are: Barnard, Colby, Colgate, College of St. Elizabeth, Columbia, Cornell, Drew, Duke, Lafayette, Douglass, New York University, Oberlin, Pennsylvania, Rutgers, Swathmore, Syracuse, Tufts, Vassar, and Wheaton.

The work is organized to care for two groups of graduate students; those who are teaching and wish to take courses in the late afternoons, evenings, and on Saturday mornings, and those who wish to do full-time residence work. It is also organized for two types of students as regards previous preparation; graduates of liberal arts colleges, and graduates of teacher-training colleges. Some of the education courses required for certification in the State of New Jersey may be taken on the graduate level. The number of credits so earned which may be applied on the A.M. degree, of necessity, varies according to the graduate requirements in the various major areas of specialization. Inasmuch as no graduate credit is given for supervised student-teaching, graduate students from liberal arts colleges, as a rule, spend a college year and a summer term or an additional semester to meet State requirements for certification and the conferment of the Master's degree. The time required depends upon the character and amount of undergraduate credits.

Majors in graduate work are offered in the fields of Administration and

Supervision, Biology, Business Education, English, Industrial Arts, Mathematics, Personnel and Guidance, Physical Science, Science, and Social Studies. In each curriculum there is a core of educational courses and major subject-matter courses. The amount of each type of work depends on the candidate's undergraduate work and is determined by the Graduate Council. The curricula in Administration and Supervision and in Personnel and Guidance are limited largely to specialized professional courses in order to meet State certification requirements.

For admission requirements, see page 24.

Students interested in this work are advised to write to the Chairman of the Graduate Council for a bulletin and full information.

OFFERINGS FOR TEACHERS-IN-SERVICE

The College now offers senior-graduate, graduate, and certification courses on campus during the late afternoon, evening, and Saturday morning, and off campus in various centers, for the convenience of those desiring professional growth through these means.

Part-Time and Extension Courses

Part-time courses, carrying residence credit, for students unable to attend the College during the regular full-time daily program-hours are offered on the campus during the late afternoons and early evenings.

Courses of the Extension Division are offered off-campus in any community in New Jersey in which the teachers-in-service desire the Montclair State College to offer a particular course and if that course appears in either the Undergraduate Catalog or the Graduate Bulletin of the College. It is necessary that twenty or more students enroll in such an Extension course.

Bulletins are published for the information of those who wish to attend part-time or extension courses. Courses which meet for one two-hour session a week for sixteen weeks receive two semester-hours' credit. Credits gained in part-time and extension courses are accepted towards a degree or a secondary teacher's certificate. Only those students should register who are willing to meet the full requirements and take all examinations. Permission may be granted in special cases for students to take work for no credit. Other information, including bulletins, may be obtained from the Director of Field Services, Montclair State College, Upper Montclair, New Jersey.

Summer Session

Those who are eligible for admission to the summer session are: (1) elementary, junior, and senior high school teachers; (2) undergraduate and graduate students of liberal arts colleges seeking secondary certificates; (3) graduate students seeking the Master's degree; (4) experienced teachers seeking administrator's and supervisor's certificates; (5) graduates of the two and three-year normal school courses who are working for a Bachelor of Arts degree; (6) normal school, teachers college, and liberal arts college

students, who have been permitted to meet certain requirements through summer session courses; (7) laymen who may wish to take certain courses because of their cultural interest; and (8) high school graduates.

The summer session is attended by approximately seven hundred students, representing about seventy-five teachers colleges, liberal arts colleges, and universities located in many states. Of these, somewhat fewer than one-quarter are undergraduate students; approximately eighty per cent hold bachelor's degrees; and about five per cent hold master's degrees. Because of the preponderance of graduate students few undergraduate courses are offered in the summer session.

The summer session begins during the last week of June or the first week of July and extends over a period of six weeks. For other information, including bulletins of the summer session, address the Director of the Summer Session, Montclair State College, Upper Montclair, New Jersey.

THE LABORATORY SCHOOL

See The Laboratory School—Page 44.

Part II

STUDENT PERSONNEL AND ACTIVITIES

STUDENT INTERESTS AND ACTIVITIES

Orientation and Guidance of Freshmen

Under the direction of the Personnel Division, and with the help of students and faculty members during the first week of the College year, freshman students report for examinations, organization meetings, social functions, conferences, and instructions. The Student Government Association is active in its cooperation. It explains and discusses various student clubs, privileges, and responsibilities. Staff members meet the new students for personal interviews, and during the semester group meetings are held with advisers. In general, Freshman Week is a time for orientation, adjustments, guidance, instructions, examinations, and social contacts.

General Citizenship

A spirit of readiness to understand objectives and to assume responsibilities grows out of Freshman Week. Each student realizes that he has become part of a State enterprise and of an active group of professional workers. Social and professional consciousness begins to take the place of individual motives.

From the first day each student is expected to make definite contributions to the welfare of his associates and to the life of the College. Students are encouraged to demonstrate initiative and leadership through cooperation and service during their life at Montclair, for these are important attributes for one who is training to be a teacher.

Student Government Association

The Student Government Association is composed of all undergraduate students. Its governing body is the Board of Trustees which includes a president, vice-president, treasurer, assistant treasurer, recording secretary, and corresponding secretary who are elected by the entire student body; the president and two representatives of the Senior, Junior, and Sophomore Classes, and the president and one representative of the Freshman Class who are elected by their respective classes; the Dean of the College, and one financial adviser appointed by the Administration, the Dean of Students, and the Assistant Director of Students, who are non-voting advisory members.

The responsibilities of the Board include the handling of all student finances, the chartering and cancelling of all clubs, improvement of social and physical welfare, extra-curricular activities, and the general conduct of the student body. Its aims are high; its spirit is excellent; and it accomplishes a great many good things.

Committees appointed by the Board of Trustees include the following:

Assembly	Liaison	Recreation Rooms
Awards	Lights, Sound, Camera	Snack Bar
Bulletin Boards	Men's Athletic Commission	Social
Citizenship	Music Organization Commission	Soliciting
Constitutions	Parking	State Colleges
Elections	Public Relations	Inter-Relations

Clubs chartered by the Board of Trustees include the following:

Agora (Men's Organization)	Orchestra (M.O.C.)
Aldornia (Honorary English Club)	Phi Lambda Pi (Men's Organization)
Aphesteon (Honorary Mathematics Club)	Phi Sigma Epsilon
Band (M.O.C.)	Players
Booster Association	Pi Omega Pi, Beta Sigma Chapter (National Honorary Business Education Society)
Bureau of Student Publications (La Campana, Montclarion, Quarterly)	Rohwec (Honorary Social Studies Club)
Cheerleaders	Science Club
Choir (M.O.C.)	Senate
Christian Fellowship	Sigma Alpha Eta
Dalphac (Women's Organization)	Sigma Delta Pi (Women's Organization)
Dance Club	Sigma Eta Sigma
English Club	Sigma Phi Mu (General Mathematics Club)
Epsilon Mu Epsilon (Business Education Club)	Spanish Club
Fencing Club	Spectrum
French Club	Star of David
Gamma Theta Upsilon	Student Education Association at Montclair
Geography Club	Tau Sigma Delta
Home Economics Club	Theta Chi Rho
International Relations Club	Tribe
Inter Nos (Classical Language Club)	Television Club
Kappa Delta Pi (National Honorary Society in Education)	Veterans Club
Men's Athletic Association	Wapalanne Club
Newman Club	Women's Athletic Association

Music and Art

Cultural background courses in music and art are required of all students. In addition, music electives and the musical organizations of the College provide opportunities for further study in fields of special interests. For requirements for a major or minor in music, see page 137.

The musical organizations of the College include:

1. *The A Cappella Choir*
2. The Orchestra
3. The Band
4. Collegium Musicum
5. The Opera Workshop
6. The Music Workshop, including various types of vocal and instrumental ensembles

Sunday evening concerts are given throughout the school year by guest artists, music faculty, and advanced music students.

Because of the proximity of New York City, the College is able to offer unusually fine opportunities in music. Field trips are frequently made to

the Metropolitan Opera, the New York Philharmonic Orchestra, and Town Hall concerts. Additional opportunities for attendance at cultural affairs are afforded by the use of the Memorial Auditorium by various community and state organizations.

The Art Workshop gives all students an opportunity to work creatively with various artistic media—oil paints, water colors, block and silk screen prints, pastels, clay, plaster, and stone. The Workshop includes a ceramic studio complete with potters' wheels, kilns, and a glaze laboratory.

Frequent field trips are taken to art museums in New York City and the metropolitan area.

Dramatics

Work in dramatics is varied and comprehensive. In the classroom dramatic literature is studied in historical perspective, as an art-form, and as a mirror of social institutions. The production of high school and college plays is studied and practiced in technical courses in which instruction in acting, stagecraft, make-up, lighting, costumes, and directing may be obtained.

Players, an undergraduate club, sponsors two major productions a year. This invaluable experience in the solution of problems facing the dramatics director is available to any student in the entire college. *Players* also sponsors an annual Drama Day at which the dramatic organizations of high schools are invited to present their work for professional criticism.

The amphitheatre affords an ideal setting for assemblies, festivals, dance recitals, pageants, and plays adapted for the outdoor theatre.

Assembly Programs

During the year a series of assembly programs is offered for the cultural benefit of the students and faculty. These programs include presentations by outside artists, student recitals and dramatizations, and student government meetings. Assembly programs are an important part of the college offering for students, and students are expected to participate regularly.

Student Exchange with French and Spanish-Speaking Countries

The College has prepared a program of teacher training in the field of modern foreign languages. After successful completion of the prerequisite years of high-school French or Spanish, language study is continued at Montclair in classes conducted entirely in French or Spanish. If the student has shown promising aptitude in his foreign language work during his freshman, sophomore, and junior years, he may be offered the opportunity to study abroad for a year in some foreign teachers college or university, under Montclair auspices. Students go to France, Canada, Spain, Mexico, or South America.

During the year of study abroad, these Montclair students follow a comprehensive program of work, including classes in language, literature, history,

art, music, psychology, etc., working with their French or Spanish-speaking classmates, submitting to the same kind of discipline, enjoying their pleasures, and experiencing their daily routine. In addition to scholarly achievement that cannot be equaled by any amount of classroom work in college, this year of study gives students a broad outlook on life, a sympathetic attitude toward the problems of other peoples, and an understanding of world citizenship—in fact, a life experience that is bound to make them better teachers of foreign languages for American high school boys and girls.

College Athletics

The College provides two athletic fields; two gymnasiums; a new health, physical education, and recreation building; and other facilities for promoting recreational activities. The principal sports for men normally include football, basketball, baseball, track and field, golf, and tennis. College varsity teams in football, basketball, baseball, tennis, track, golf, fencing, and bowling maintain in normal years full schedules with colleges located in five eastern states and the District of Columbia. The College junior teams play scheduled games within the State. Intramural athletics are promoted.

The women's athletic activities normally include volley ball, basketball, softball, tennis, golf, archery, and fencing. WAA is a very active undergraduate organization and sponsors a variety of intramural competition, sport days, and invitation games. The Modern Dance Club, while not an athletic activity, is an important part of the women's activity program.

Publications

The Arrowhead supplies instructions, Student Government Association rules, descriptions of organizations, songs, cheers, and other matter of special value to new students.

The Montclarion, the student news publication, covers a variety of subjects of special interest to students. It is published semi-monthly.

The Montclair Quarterly is the student literary magazine published by the student body.

La Campana, the college annual, is published each year by the Senior Class and contains general information of special value to graduates and their friends.

The College High Crier, student newspaper of the College High School, affords college students an opportunity to learn advisership through working with the young high school editors.

La Campanilla, the yearbook of College High School, is sponsored and published by the senior class of College High School.

Publications of the Bureau of Field Studies include pamphlets and leaflets describing field studies.

Publications of the Teaching Aids Service of the College Library include lists of audio-visual aids in many subject matter fields.

Dormitory Life

The regulations governing dormitory life and the opportunities for social affairs, entertainments, and athletics are determined and promoted by the College President, the Dean of Students, the Assistant Director of Personnel for Women, dormitory directors, the Honor Board of the Women's Inter-Dormitory Association, and the Council of the Men's Dormitory.

The College possesses three dormitories: Chapin and Russ Halls house two hundred women and Stone Hall houses one hundred men. Increasing college enrollment has resulted in waiting lists for dormitory housing each year; students desiring consideration for dormitory housing should write to the office of the Dean of Students in order to request an application to a dormitory. A good time to do so is at the time application is made for admission to the College.

The distance one lives from the campus is an important consideration for selection for dormitory occupancy. Those students not living within commuting distance who cannot be accommodated in a dormitory are assisted in obtaining a room in a private home near the campus.

STUDENT PERSONNEL SERVICES

Believing that accomplishments of individual students depend upon their energy, adaptability, and general personal fitness, the College invests profitably in promoting the physical health, emotional stability, and social attitudes and habits of all students.

Physical Health

The College campus is located on an elevation in clean, open country. The campus furnishes adequate facilities for healthful outdoor exercises, and the gymnasiums provide for physical education, indoor sports, and dances.

The College employs one full-time physician, two full-time nurses, and two resident nurses, who give the students thorough physical examinations and advise them in regard to medical attention and correction of defects. The College conducts an annual tuberculosis program with chest X-rays of students and other College personnel. An annual physical examination by the College Physician is required of all students. The Medical Department is located in Edward Russ Hall under the supervision of the College Physician and is available to commuting, as well as dormitory students. Members of the Personnel Division advise concerning health facilities and conditions. During the entire year, including the summer months, a full-time nurse lives in the dormitory in order that she may serve dormitory students and oversee the general health conditions of all students. A voluntary Medical Reimburse-

ment Insurance policy is available to students at \$13.50 per year to help pay hospital and surgical bills incurred as a result of illness or injury.

Mental Health

In the freshman year the course in Mental Hygiene and Personal Adjustment serves to provide for group discussion of problems of personal and professional orientation to college life.

Students are responsible to their advisers for individual conferences. Advisers are free to formulate and carry out their own plans for serving individual and group needs of students assigned to them.

The student advisory and guidance program is extended so that it reaches the whole student body. All students are encouraged to make contacts with staff members in an informal fashion so that they may profit from a more personal relationship than that of the more formal classroom association. Special problems of adjustment which arise from time to time are referred to the psychology and mental-hygiene staff. Students who are in need of medical and psychiatric assistance are aided in obtaining proper diagnosis and treatment. It is desirable that students avail themselves of the opportunities offered by such types of service.

The College is fortunate to possess the services of a consulting psychiatrist who is available for conferences in the College health service on a regularly scheduled basis. Students are encouraged to utilize his services, and appointments can be scheduled in the office of the Dean of Students.

Through cooperative efforts of the Personnel Division and the faculty, particularly through the faculty advisement program, students are assisted in their adjustment to College. Not only are students encouraged to visit the Personnel Division in seeking solution to problems that arise, but they can be assured that the various departments of the College are referring students when assistance is deemed necessary in regard to scholastic achievement, work habits, emotional problems, financial problems, etc.

An organized sequence of courses is planned for graduate students who wish to prepare for guidance work in the public schools. A Master's degree in Guidance is granted to students who complete this work satisfactorily. Full descriptions of courses may be found in the Graduate Bulletin.

College Social Activities

A program of social activities with emphasis on social and recreational value is encouraged each year by the College Social Committee. All-College dances are sponsored by the Student Government Association; class and club dances, social affairs, banquets, and shows are sponsored and run by their respective organizations. The dormitory Thanksgiving, Christmas, and Easter dinners, the All-College Carnival, and many other affairs have become traditional in the life of the College.

Scholastic Adjustments

Lack of scholastic adjustment may be due to physical health or emotional instability, and in either case should be understood and remedied. There may be other cases where individual students need scholastic guidance. It is not uncommon for students' subject-matter interests to change and for students to require transferral from one course to another or from one department to another. Furthermore, students are sometimes troubled by their ratings and schedules, and frequently the matter of study habits demands careful analysis and directed training. Various types of adjustments may be made in classroom situations by providing a better understanding of troublesome problems and thereby relieving tension. All problems of adjustment are considered in the spirit of helpfulness. To this end, the Personnel Division is informed of scholastic achievement, and, through personal interviews and other follow-up, determines the best corrective measures.

Financial Adjustments

The College is not prepared to render financial help in every case where help is needed. Yet it is in a position to assist many of those who are particularly deserving. Assistance is commonly rendered through loans and student employment. This program is administered through the office of the Dean of Students, and students are encouraged to inquire in regard to their possibilities for assistance.

State Scholarships

The state legislature awards annually to the State Colleges a number of scholarships not to exceed ten per cent of the number of freshman students. Those students who are applying for admission to a State College and who wish to compete for a scholarship are invited to write to the Director of Admissions and request a scholarship application blank. At the present time, the scholarship pays the tuition fee of \$150 per academic year.

Work Scholarship Funds

The State offers deserving students the opportunity to do socially desirable work of such a nature as may be provided in the College library, laboratories, cafeteria, and offices. As a minimum, these scholarships cover tuition fees, and are available to not more than 25% of the college enrollment. Interested students should apply to the office of the Dean of Students.

Edward Russ Scholarship Fund

This fund was established from the residue of the estate of the late Edward Russ. The proceeds are used to assist deserving students who, through scholarship and personal fitness, offer assurance that they will make especially valuable contributions to the profession of teaching.

Chapin Memorial Fund

This loan fund was established by the Alumni Association in honor of the late Dr. Charles Sumner Chapin, Principal of Montclair State Normal School. It is incorporated under the direction of a board of trustees. Loans are made principally to upper class students and always on the basis of the candidate's personal and scholastic fitness for the profession of teaching, as well as the candidate's financial need.

Applications for loans are made through the office of the Dean of Students. Each loan must be secured by at least one property owner, and bears no interest.

SCHOLARSHIPS

A few additional scholarships are granted to students of marked personal fitness and of accomplishments in special fields. Candidates for such scholarships should contact the Dean of Students.

John C. Stone Scholarship

This fund was established by the friends of the late Professor Emeritus John C. Stone in memory of his contribution to education. The proceeds are used as a scholarship for mathematics majors.

Margaret B. Holz Fund for Student Exchange

This fund was established for college students who study abroad for at least one year under the direction of the Foreign Language Department. The exchange student movement at Montclair was conceived and developed by the late Professor Margaret B. Holz, and it was in her memory that a fund of \$3,000 was created. The proceeds of the fund provide financial assistance to those members of the Modern Foreign Language Department whose desire to study abroad would be facilitated by financial assistance.

Field Studies Fund

This fund was established by Dr. Harold S. Sloan, a professor at the College from September, 1929, to June, 1936. The interest on an investment of \$10,000 is used for the development of the work of the Bureau of Field Studies.

Clarence O. S. Howe Memorial Organ Fund

The fund provides organ scholarships each year from the income derived from this memorial to an old friend of the College.

Student Employment

The College wishes to cooperate with worthy students who earnestly desire to follow through the four-year college course. This is often done by affording to students an opportunity to participate in various types of work off campus.

However, students who work off-campus, in employment of a type not related to college courses, should do so only for a number of hours per week that will not interfere with their study and successful completion of college programs of study.

Students who are maintaining an acceptable grade average and desire information on employment opportunities should contact the office of the Dean of Students.

Veterans

Students attending Montclair under the provisions of federal laws assisting veterans to further their college study are encouraged to visit the office of the Dean of Students for assistance in this regard.

Parking

All students who drive automobiles to the campus are required to register them according to instructions which are sent to them from the office of the Dean of Students. Because of crowded parking conditions, it is imperative that parking regulations be observed; those students not doing so will not be allowed to drive on campus. To avoid parking difficulties, students are encouraged to use public transportation.

Part III

THE COLLEGE CURRICULA

FUNDAMENTAL PRINCIPLES

The content, organization, and instructional procedures of the various curricula and courses are guided by the following principles:

- (1) The definite objective of a professional college makes certain requirements necessary, yet in so far as practicable the special interests of individual students should be recognized.
- (2) After the major and minor fields of specialization have been chosen, there should be comparatively little opportunity for free elections.
- (3) Each curriculum should provide a basis of required background courses and professional activities.
- (4) Each curriculum should provide for an understanding of the aims and organization of secondary education and for guidance and skill in selecting, organizing, and presenting instructional materials.
- (5) Each curriculum designed to prepare secondary-school teachers should make adequate provision for specialization.
- (6) Subject-matter should be treated professionally.
- (7) The courses and activities in a given curriculum should be sequential and integrated.
- (8) Courses should be broadly humanizing and should be related to what takes place in society and what is done in school.
- (9) The demonstration school should be the laboratory and integrating center of all courses and all curricula.
- (10) General educational theories and techniques should be exemplified in regular class instruction and frequently demonstrated in the laboratory school.
- (11) The relative value of the elements of the professional instruction should be checked by the strengths and weaknesses of the college product.
- (12) The curricula and courses of the College are the servants of a changing society, and therefore should be subject to continual adjustment.

The above principles are recognized by the staff as basic to the organization and development of the college curricula. They have directed and unified the work of the staff in its selection, organization, and treatment of curricular materials.

Students should recognize that a professional school has, by its very nature, definite aims and objectives, and therefore practical reasons for preparing and requiring certain fundamental types of work. Such requirements are characteristic of professional schools generally. It is, however, the purpose of the College to recognize the interests and aptitudes of individual students and to be guided by these, provided that they do not lead to haphazard and unsystematic selections and procedures.

The instructional work of each curriculum is divided into three areas: (1) professional background; (2) professional education; (3) professional subject matter. Each of these areas is described in the paragraphs which follow.

GENERAL ORGANIZATION OF INSTRUCTION

The organization of the College for instructional purposes is in accordance with the Principles numbered 1 to 11, as stated on the first pages of Part I of this catalog.

Relations to the Schools of the State

The college staff recognizes its relationship to the elementary, junior, and senior high schools which it serves. The following contacts are maintained:

Close relationships are maintained with the State Department of Education through its Commissioner of Education and Assistant Commissioners.

The State Director of Teacher Education is in continual contact with the College.

Frequent conferences on problems of education are held on the campus.

a. General conferences with city and county superintendents, supervising principals, and junior and senior high-school principals.

b. Conferences with high-school executives devoted to special problems in the secondary fields.

c. Department conferences with heads of departments and teachers in the respective fields.

The College collects and analyzes curricula which are administered in the various schools in the State.

The College has contacts with various elementary, junior, and senior high schools through its supervisors of student-teaching and through the representatives of various subject-matter departments.

The College contacts the schools and becomes familiar with their needs through its Placement Bureau and follow-up service.

The College cooperates with various school officials and agencies in making research studies.

Principals, heads of departments, and teachers visit college classes and classes in the College High School from time to time.

FIELDS OF INSTRUCTION

The general instructional division of the College has three well-established functions. The first is to provide each student with a rich background. The second is to provide professional subject matter which includes ample margins of scholarship. The third is to provide professional theories and techniques and their application in student-teaching. Each of these three departments of the instructional division is discussed briefly in the following paragraphs.

Professional-Cultural Background (General Education)

Every teacher who is to recognize and use the many-sided interests of a school pupil must have a broad philosophy of life and a human interest in the life-experiences of youth in present-day society. Furthermore, every teacher who is to specialize in a field of knowledge which is somewhat narrow should be familiar with the interests, activities, and problems of present-day society as they are related to the subject-matter of his field of specialization. In order to meet these professional needs the College requires that every student, regardless of major field of specialization, do two things. First, he must become familiar with the social, political, economic, industrial, scientific, religious, literary, and aesthetic phases of life. Second this background of culture should be a body of related and well-assimilated knowledge rather than

a collection of isolated parts. In other words, the interdependence of each of the phases of life mentioned above should be recognized and made meaningful.

The professional-cultural background courses comprise nearly one-third of the total college requirements for graduation. The specific requirements may be found in Part III under the heading of Professional Background Requirements.

Professional Subject-Matter (Specialization)

Professional subject-matter refers particularly to courses in the student's major field of specialization. It is thought of as departmental specialization built upon the related and fundamental body of knowledge which has been called professional background.

Every teacher should have thorough command of the subject-matter in his special fields of instruction. This subject-matter does not include merely the bare requirements for the prescribed work in schools. It does include such scholarship as will stimulate a true intellectual curiosity and provide for rich margins of knowledge.

Each student is required to complete a minimum of thirty semester-hours in his major field of interest in addition to the units required of all students. It has been the policy of the College since its organization in 1927 to recognize that its professional duty is to treat its subject-matter professionally, that is, to provide not only for an academic knowledge of subject-matter but also a teaching knowledge of that same subject-matter. A teaching knowledge requires an understanding of the way in which subject-matter is to be organized for teaching purposes and how it may be presented to the best advantage under varying conditions to students.

Department of Professional Education

The prospective teacher should have not only an adequate cultural background and a thorough teaching knowledge of subject-matter in his special fields, but also a teaching knowledge of adolescent pupils and an understanding both of the processes involved in their instruction and of the part played by education in contemporary society.

The fact that the techniques used in the professional treatment of subject-matter cannot be divorced from the subject-matter itself makes it apparent that there must be a close relationship between the subject-matter departments and the department responsible for training in the theories and methods of education. (See also Part III for descriptions of courses.)

This Department offers courses in the psychology and philosophy of secondary education, in various techniques and methods of teaching, and in the principles of administration of both elementary and secondary schools.

Curricula for home economics, fine arts, industrial arts, music, and physical education lead to certification to teach in elementary and secondary schools. Professional education for these curricula include organization, principles and techniques, observation and experience on the elementary school level in addition to similar provisions on the secondary school level.

D—Poor

F—Failure

Inc.—Incomplete work

WP.—Withdrawn, passing

WF.—Withdrawn, failing

Where a student has had an unavoidable absence, or for reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester. This mark must be removed by a final grade within six weeks, or the course cannot be credited and the mark becomes "F."

Degree and Certificate

After satisfactory completion of all requirements for graduation the degree of Bachelor of Arts is granted.

Those who complete requirements for a degree at the Montclair State College also qualify for a Standard Certificate to teach the subjects of the major in grades 7-12 in the schools of New Jersey and for certain major subjects in the elementary schools. The Montclair graduate is eligible for a Limited Secondary Certificate. Those graduates who complete courses prescribed by the State Board of Education are also eligible for a limited elementary endorsement on the Secondary Certificate.

WEIGHTED SCORES

For purposes of striking averages and obtaining rankings, marks receive the following weighted scores for a semester-hour: A, +4; B, +3; C, +2; D, +1; F, 0.

Scholastic Honors

Students graduating with point averages of 3.45 or better for all undergraduate courses completed at Montclair are recognized as honor students with the following designations:

Average of 3.45—3.64—*cum laude*

Average of 3.65—3.84—*magna cum laude*

Average of 3.85—4.0 —*summa cum laude*

Requirements for Graduation and Bachelor of Arts Degree

A major requiring a minimum of thirty semester-hours.

A minor of eighteen semester-hours leading to certification to teach the additional subject of the minor may be completed in some curricula by use of elective options.

Additional credits in required and elective work to total one hundred and thirty semester-hours, for the class graduating in 1960. A total of one hundred and twenty-eight credits is required of classes graduating in 1961 and thereafter.

Two semester-hours of work in physical education.

A minimum of two semesters of resident work.

A minimum of 150 clock-hours of student-teaching to satisfy the State requirement.

Scholastic Standards

Comprehensive evaluation of the student's academic standing is indicated in his grade point average. The numerical equivalents for determining grade point average follows: A, +4; B, +3; C, +2; D, +1; F, 0.

Students must maintain cumulative grade point averages as follows:

For sophomore standing, the student must have completed at least 26 credit hours with a 1.6 average.

For junior standing, 58 credit hours with a 1.8 average.

For senior standing, 90 credit hours with a 2.0 average.

For graduation, 128 credit hours with a 2.0 average.

The grade point average is determined by dividing the total grade points earned by the total number of semester hours, whether passed or failed.

Transfer students will not be accepted unless they have a cumulative grade point average of at least 2.0. Transfer credit will not be allowed for letter grades below "C."

PROFESSIONAL BACKGROUND COURSES

The professional objectives of these cultural courses have been discussed in this bulletin. The courses included in this division are required of all students and amount to nearly one-third of the total semester-hour requirement for graduation.

A cultural background should be a broad, well-unified body of knowledge. In accordance with the principle of integration, the greater part of the work in this department is organized into large units of instruction. For instance, *The Development of World Civilization* is based upon present-day problems, and includes a carefully articulated study of the social, political, economic, industrial, religious, scientific, literary, and aesthetic phases of contemporary civilization. The problems of contemporary civilization are used as the fundamental motives for studying the history of civilization from the days of the Egyptians down to the present time. The study of the whole span of civilization is attempted for the purpose of showing how other ages have met with similar problems and how through the ages these problems have developed. This unit has been organized by the Departments of Social Studies, English, Science, Geography, and Education, and is given by these various departments working together. Throughout this course departmental boundaries and barriers are broken down, in order that related subject-matter may become a unified body of knowledge. Such an effort to bring subject-matter into its natural relationship should be beneficial to prospective teachers who have need for broad understandings, clear meanings, and balanced judgments.

A second large unit of work centers about the literary and aesthetic needs and interests of civilization.

It should be noted that the courses in *The Development of World Civilization* and *Western World Literature* parallel each other and are closely articulated and integrated.

The other smaller units of work such as *Foundations of Language* and *Survey of Science* do not follow a chronological order with the same degree of precision. However, the development in these fields parallels the larger units in social studies and English.

GROUP I. Social Studies

SOCIAL STUDIES 100A and 100B. *The Development of World Civilization*

This course is designed to use the historical approach to study the cultural complex in which we find ourselves. Study is made of the cultures which have gone into the making of the present world cultures, especially but not exclusively, Western Civilization.

Credit: 3 semester-hours each

SOCIAL STUDIES 200A and 200B. *Contemporary American Life*

This two-semester course introduces the student to a broad area of social science, rather than to economics, political science, and sociology as such. An attempt is made to acquaint students with the basic premises of our democratic society, as well as the nature and structure of our social, economic, and political institutions. Emphasis is placed upon the changing character of our society and the relationships which exist between social, economic, and political problems. The course seeks to prepare students to cope with some of their individual problems and to equip them for active citizenship.

Types of social organization are considered, along with examples of social disorganization. The connection between governmental functions and social problems is explored. The distinctive characteristics of the American economy are studied, and economic groups and governmental economic policies are treated. Attention is focused upon democratic government as it functions in the United States. This includes a study of public opinion, pressure groups, and political parties, as well as the framework of government. Throughout the course an effort is made to show the problems of contemporary American life in relationship to those of other nations.

In the presentation of this course, the usual classroom procedures are supplemented by the requirement that each student gain some knowledge through his own investigation and participation. Attendance at court sessions, municipal government meetings, and political rallies; observation of welfare and labor-management agencies in action; and consultation with representatives of business, government, labor, and social agencies are required of each student. A special effort is made to provide an opportunity for students to meet in seminars with representatives of the United Nations.

Credit: 3 semester-hours each

GROUP II. Humanities

There are seven units required in this group. These units are concerned (1) with furnishing materials of background and critical principles that insure a knowledge of the great masters of literature of the world, appreciation of the literary forms which they created, and a feeling for the best in modern life and thought as expressed in literature, and (2) with developing the power of communication in speech and writing.

ENGLISH 100C. *Fundamentals of Writing*

The purpose of this course is to increase the student's skill in the art of thinking and to enable him to express his ideas clearly in written form. There is regular practice in expository writing, stimulated by collateral reading and discussion. Problems in diction, outlining, organization, and development are explored, and the individual student is helped to overcome his deficiencies in mechanics and technique. The course culminates in the writing of a research paper and the study of note-taking and elementary research procedures.

Credit: 3 semester-hours

SPEECH 100D. *Fundamentals of Speech*

This basic course is designed to help the prospective teacher to improve his ability in speaking. Effective voice production and clear, pleasing diction are developed through speech activities. The work of the course is adapted to the individual needs of the students as revealed by phonograph recordings and diagnostic tests. The work may include prescribed additional practice in the speech laboratory. Failure to achieve an acceptable standard of performance results in the withholding of credit until the student demonstrates satisfactory achievement.

Credit: 3 semester-hours

ENGLISH 100G. *Western World Literature*

The aim of this course is to introduce the student to representative works of literature of the western world, chosen from each of the cultural epochs—Hebrew, Greek, Roman, Medieval, Renaissance, Neo-Classical, Romantic, and Modern.

Credit: 3 semester-hours

LANGUAGE 300. *Foundations of Language*

The purpose of this course is to give every student, as a prospective teacher, (1) a survey of the background, growth, and structure of the English language from its Indo-European origin to modern times, (2) an introduction to the science of linguistics, (3) an appreciation of several foreign language patterns, and (4) a rich fund of information in the field of general language.

Credit: 2 semester-hours

FINE ARTS 100. *Introduction to the Visual Arts*

This course is required of all students except those majoring in fine arts. The ways in which man has expressed himself in the many forms of the visual arts including painting, ceramics, sculpture, weaving, print-making, architecture, the theater, motion pictures, and photography, are explored through studio work, demonstrations by artists and craftsmen, reading discussion, and trips to art sources. Emphasis is placed upon the development of an understanding of the nature of art and the experiences of art, their significance to the individual, and their role in a culture.

Credit: 3 semester-hours

MUSIC 100. *Music Appreciation*

This course aims to help the student discover music for himself and to use it as a vital force in life enrichment. Emphasis is placed upon stimulating the enjoyment of music rather than on building up a body of facts about it. By means of musical performance by the instructor and students and by directed listening to recorded music and to the radio and television, the student is acquainted with masterpieces of music which should be the possession of every generally cultured person.

Credit: 2 semester-hours

Required Elective in Humanities

In addition to the required general education courses in the humanities each student is required to select one two-point elective in this area of work. Students will make selections from a variety of elective offerings.

GROUP III. Science

As his cultural background work in science, the student surveys the earth sciences (100C), either physical science (100A), or biology (100B), and hygiene and health.

SCIENCE 100A. *Survey of Physical Science*

This course deals with the basic scientific discoveries which have created present-day activities in the fields of astronomy, atomic energy, and meteorology. The social, economic, and educational consequences of these discoveries and the industries growing out of them are treated in such detail as to be of service to prospective teachers of social studies, English, languages, and other subjects.

Credit: 4 semester-hours

SCIENCE 100B. *Survey of Biology*

The organization and behavior of plants and animals are treated in a manner devised to develop understanding of man's structure and behavior. Mechanisms of heredity and evolutionary change are considered. An understanding of how a balance may be achieved among living things is developed to show desirable land use and good agricultural and forest practices. Class

lectures and discussions are supplemented with lantern slides, moving pictures, laboratory experiments, and field trips.

Credit: 4 semester-hours

SCIENCE 100C. *The Earth Sciences*

Land forms and water bodies are treated from the standpoint of origin and evolution, and, together with the atmosphere, are considered in relation to their influence upon life and activities. The laboratory work consists of the study of topographic maps, models, and other methods of illustration. This course affords excellent background for all courses in geography.

Credit: 2 semester-hours

HEALTH EDUCATION 100. *Healthful Living*

The purpose of this course is to aid the student in achieving and maintaining optimum health and to understand the principles on which it is founded. Among the topics covered are: prevention and treatment of diseases, grooming, nutrition and weight control, the effects of alcohol and narcotics, marriage and parenthood, and the community aspects of health.

Credit: 2 semester-hours

PHYSICAL EDUCATION 100A and 100B. *Physical Education Activities*

The work of the freshman year consists of an orientation program whereby the students are provided with an opportunity to become acquainted with a variety of team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: $\frac{1}{2}$ semester-hour each

PHYSICAL EDUCATION 200A and 200B. *Physical Education Activities*

The work of the sophomore year permits the student to select within a given pattern team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: $\frac{1}{2}$ semester-hour each

GROUP IV. Mathematics

MATHEMATICS 300. *The Social Uses of Mathematics*

This course presents an advanced treatment of the fundamental processes of arithmetic, approximate computation, percentage, simple and compound interest, consumer credit and installment buying, savings and investment, mortgages, taxation including the income tax, insurance, pensions and annuities, social security, cost of housing, and budgeting. Commercial, industrial, and consumer applications are stressed.

Credit: 2 semester-hours

MATHEMATICS 400. *Educational Statistics*

A comprehensive treatment of statistical problems fully considers standard methods of (1) the collection of raw data, (2) the systematic organization of such data, (3) the analysis of the data including the computation of measures of central tendency, of variability, and of correlation, (4) the interpretation of results including their limitations. Special attention is given to educational, economic, and social problems which require statistical analysis.

Credit: 2 semester-hours

Required Elective in Mathematics or Science

In addition to the required general education courses in mathematics and science, each student is required to select one two-point elective in either mathematics or science. Students will make selections from a variety of elective offerings.

THE DEPARTMENT OF EDUCATION

Even though the principal function of the entire College is educational, there is a Department of Education which integrates the work of the entire College by coordinating all the professional aspects of training such as subject-matter, teaching techniques, observation, and student teaching. The Department carries out its responsibility through: the courses in education, the College High School, the student teaching program, and the placement and professional adjustment services. The work of these agencies transcends all departmental lines; the special interests and functions of any one department contribute to the professional aims of the institution which are broader in scope and purpose than those of any of the subdivisions of the College.

Since the main purpose of the College is professional, departmental aims are identical or similar. Hence the aims of the Department of Education are not exclusively its own. Its chief and particular function, however, is to assist and to give leadership in the following ways:

- (1) It helps the prospective teacher to take an intelligent and active part in his own personal and professional orientation.
- (2) It arouses an awareness of the possibilities of the profession of teaching as an opportunity to invest one's interests and powers in promoting the social good.
- (3) It gives an understanding of both elementary-school and high-school students, their natures, interests, and needs.
- (4) It provides for a gradual induction into the profession of teaching by means of a carefully arranged sequence of education courses, by observation of and participation in school classwork.
- (5) It directs the student as he becomes an active and responsible teacher in the student-teaching program.
- (6) It provides an analysis of the student-teaching experiences.
- (7) It aids in coordinating the work of the college departments through its integrating functions.

- (8) It provides training which will aid the student in taking an active part in the extra-curricular life of the school and in community life.
- (9) It gives a forward look into the profession so that it shall be regarded as a worthy, life-time vocation.

The department not only promotes the professional aspect through its materials and organization, but supplements the work of professionalization of all the departments.

Organization and Activities

The required courses in education have been designed to give a survey of the essentials of the professional aspects of teaching. Five points of view are emphasized: the sociological, the biological, the psychological, the pedagogical or technical, and the philosophical. Although in a given semester course only one or two of these fields receive special emphasis, the content is not limited to them. There is rather the attempt throughout to conduct an integrated treatment of professional problems.

Special attention has been given to the sequence of the required courses and to the units within courses. In so far as it is administratively possible and expedient, courses in education parallel those in other departments. In this way the various departmental courses reinforce and supplement each other.

In the organization of all courses the needs of society and the needs and interests of the students are considered. Content material is taught, not as detached from the student's every-day world, but as part of his professional life in pre-service training. Both logical and psychological organizations are utilized, the former for completeness and unity, the latter for vitality.

The work in psychology includes some opportunity for firsthand observation of children and adolescents in their homes, on the playground and in other out-of-school settings, and in school. The aim is to acquaint the student, through any means available, with stages in normal development from infancy through adolescence. An effort is made to build an understanding of what is involved in the psychological development of the individual and a basic understanding of the needs of children and adolescents together with some insight into the recourses through which these needs may be satisfied. Special emphasis is given to the particular problems encountered in school situations.

Observation and participation in the College High School occupy a large place in the courses in educational integration. It is through personal contact with pupils and with actual school conditions that an understanding of the meaning of educational theory is developed.

Principally for the purpose of orientation, freshmen are assigned to a limited number of observations in College High School. An organized experience in community social agencies is required as part of the pre-professional education of all students. This normally takes place during the freshman year.

Sophomores are assigned to the study of specific, individual College High School students.

Juniors are assigned by their major departments to specific demonstration teachers for a series of carefully planned observation and participation experiences. Also, all juniors spend one week, full-time, in a public school observing and participating in the teaching.

Seniors are assigned to the College High School demonstration classes taught by their special departmental methods course instructors. During the senior year the emphasis is on relating the activities of the demonstration class to the work done in the methods courses.

Immediately preceding the work in student-teaching offered in the senior year, a course in the Development of Educational Thought is given. The major purpose of this course is to study with the student those basic and fundamental principles that should guide our secondary schools.

Student-Teaching

The plan of student-teaching which the College carries out is based upon the principle of internship. At the beginning of the second semester the seniors leave the campus and take up the work of teaching in the schools of New Jersey. Each student is assigned to an experienced public-school teacher in a secondary school, under whose guidance he observes, participates, and teaches. Students whose major subject certification includes the elementary school are also assigned to an experienced elementary-school teacher for a comprehensive experience covering all grade levels.

The student spends the first week in observation and participation, then gradually takes over teaching responsibilities—one class, then two, then three. For the last weeks of the period in each school he has full responsibility for certain classes. Homeroom guidance, club work, student council meetings, and all the extra-classroom activities which round out the program of the modern public school are a part of his privileges and responsibilities.

The student returns from this experience with a new point of view and a new spirit. He has actual knowledge of the responsibilities of the teacher; his perspective is broadened; he has begun the development of his teaching skills; and he has a new insight into the psychology of the growing child.

Following the student-teaching period students return to the campus for an intensive study of the practical problems of teaching.

Supervision of Student-Teaching

During the period of responsible student teaching each student is frequently visited at work by members of the college faculty—representatives of the subject-matter departments and the Department of Education. Individual and group conferences, and other approved supervisory techniques are employed in the improvement of teaching ability.

At the half-way point in the practice period the students return to the campus for a day's conference. General discussion, group meetings, and

individual consultation with the staff members afford an opportunity for clearing up problems and difficulties which the students have encountered in the field.

Placement and Professional Adjustment Service

Since the Department of Education is responsible for the administration of the student-teaching program, its close contact with the various public schools of the State makes it the logical department to direct the work of placement of graduates. The Placement Bureau serves two purposes: helping the graduates of the College to secure positions suitable to their training and abilities; and, by so doing, cooperating with school authorities who are seeking to fill teaching and administrative positions. Because of its relationship with the Department of Education, the Bureau is able to provide definite and reliable information relative to the training, experience, and personal fitness of candidates. It arranges for personal interviews and for observation of candidates in teaching situations.

Credentials for every graduate of the College are compiled from class records, reports on student-teaching, and from information secured by consultation with heads of departments, the Registrar, faculty counselors, supervisors of student-teaching, members of the personnel division, and others who may be informed as to special aptitudes and activities.

In order to fulfill its obligations to both employers and prospective teachers, the Bureau requests complete information about vacancies to be filled. It assumes important responsibilities to the teacher, to the individual school, and to public education as a whole.

The following statement of requirements is effective with the class of 1961 and subsequent classes. For a description of the requirements for classes graduating in 1959 and 1960, see the catalog for 1956-1958.

Courses numbered EDUCATION 100, 201, 202, 303, 304, 401, 403 and an education elective are required of all students; courses numbered otherwise are elective.

THE FIRST YEAR

EDUCATION 100. *Mental Hygiene and Personal Adjustment*

The course in mental hygiene and personal adjustment offers an accumulation of suggestions from psychological, biological, sociological, and educational literature which the college student may use in building his personality with the facilities available on the campus. Problems of human relationships and general orientation in college and in life are discussed.

Credit: 2 semester-hours

THE SECOND YEAR

Psychological Aspects of Education

EDUCATION 201 and 202. *Human Development and Behavior, Part I and Part II*

These courses survey the psychological aspects of development and behavior from the prenatal period through adolescence. Emphasis is placed upon physical, emotional, intellectual, and social growth and development; the learning process with applications to educational situations; personal and social adjustments as they are found in the home, school and community; guided observations of individual children and adolescents, designed to furnish substance to class room discussions and to help the student gain further understanding of human behavior.

Credit: 3 semester-hours each

THE THIRD YEAR

Pedagogical and Technical Aspects of Education

EDUCATION 303. *The Teacher in School and Community*

This course provides the prospective teacher with a knowledge and understanding of the following areas of professional concern: (1) the organization and role of the public school in American society, (2) the nature of teaching as a profession, (3) the evolving role of the school in community improvement, and (4) the function of the teacher in school-community relations.

Credit: 3 semester-hours

EDUCATION 304. *Principles and Techniques of Secondary Education*

This course provides the student with a basic orientation in the following areas of professional concern: (1) the teacher's role in the teaching-learning process; (2) the sources, selection, and use of teaching aids; (3) the routine activities and auxiliary responsibilities of the teacher; and (4) the development and maintenance of desirable pupil behavior.

Credit: 3 semester-hours

Majors in subjects providing certification in elementary and secondary schools will take the following course in place of EDUCATION 304.

EDUCATION 304X. *Principles and Methods of Teaching*

This course is concerned with the principles and methods of teaching at all grade levels, both elementary and secondary. Points of similarity and difference in teaching at the different levels are stressed.

Credit: 3 semester-hours

THE FOURTH YEAR**EDUCATION 401. *The Development of Educational Thought***

The purpose of this course is to acquaint the student with the three major philosophical traditions of idealism, realism, pragmatism, and their educational implications, in order that he may begin to formulate his own philosophy of education. These three traditions are studied in their historical and contemporary contexts through text and primary source readings.

Credit: 3 semester-hours

EDUCATION 403. *Supervised Student Teaching*

Every student completes ten weeks of student teaching in the schools of New Jersey. At the beginning of the second semester the seniors leave the campus and take up this important assignment. Guidance is given by a good teacher in the cooperating school, and by supervisors from the College who come to observe the work. A more complete description is given on page 53 of this catalog.

Credit: 8 semester-hours

Note: The classes graduating in 1959 and 1960 will spend twelve weeks in their student-teaching experience and will receive ten semester-hours of credit for this work.

Each student will select one of the following elective courses to complete the required work in the Education Department.

EDUCATION 405. *Teaching the Block-of-Time Program in the Secondary School*

Following a study of the philosophical and psychological bases of the block-of-time program, major emphasis is placed on the methodological problems involved in teaching the program and the development of resource units for use at different levels.

This course is open only to those students who have a major-minor combination of English and social studies.

Credit: 3 semester-hours

EDUCATION 451. *Guidance for the Classroom Teacher*

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what it is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor.

Credit: 3 semester-hours

EDUCATION 491. *Measurement and Evaluation in Teaching and Learning*

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas and in appraising, marking, and reporting pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles test scores, and interprets test data.

Credit: 3 semester-hours

OTHER COURSES IN EDUCATION**General Aspects of Education**

The following courses are elective. They cover various phases of education and supplement the work already described. Electives are offered in the junior, senior, and graduate years only.

Some of these courses are continued from the old curriculum in order to provide certification courses for special and graduate students. These courses will be offered as part of the old curriculum for the classes graduating in 1959 and 1960 and may be offered in the Part-Time and Extension Division for students needing education and psychology courses to meet requirements for the teaching certificate.

EDUCATION 200A. *Child Growth and Development*

This course covers the essentials of growth and development from the psychological and educational points of view. It includes all aspects and stages of development from early infancy to adolescence. Stress is placed on firsthand observations of children in home, school, and play situations and elsewhere. Evaluation of materials gathered through such observations furnishes part of the material for discussion.

Credit: 2 semester-hours

EDUCATION 200B. *Adolescent Psychology and Mental Hygiene*

This course stresses: (1) the development and growth of the normal adolescent; (2) problems which are related to normal development as they are met in school and elsewhere; (3) problems which occur because of deviations in any aspect of development—physical, mental, emotional, social, moral; (4) some techniques for understanding and dealing with this age group.

Credit: 2 semester hours

EDUCATION 300A. *Aims and Organization of Secondary Education*

The content of this course may be summarized in the following topics: (1) nature and function of the American secondary school; (2) historical

development of secondary education in the United States; (3) organization of administrative units; (4) secondary education in other lands; (5) the students; (6) the program of studies and activities; (7) the staff, (8) buildings, grounds, and equipment; (9) cost and support of education; and (10) the secondary school as a social and economic instrument.

Credit: 2 semester-hours

EDUCATION 300B. *Principles and Techniques of Teaching in the Secondary School*

The purpose of this course is to help each student: (1) to acquire a knowledge of general and specific techniques and the basic principles involved in their utilization; (2) to acquire initial skills in selecting and preparing materials and in manipulating tools and instruments which will be utilized in vitalizing instruction; (3) to study the problems and techniques of effective instructional planning. Activities include: reading and discussion of case studies and other professional literature dealing with current problems and practices, directed observation in the College High School, exploring courses of study, learning to operate and use various mechanical teaching aids, and preparing both a unit and a daily lesson plan.

Credit: 2 semester-hours

EDUCATION 302A. *Television in Education Workshop, I*

This is an experimental workshop course for students on the undergraduate level in which a study is made of the educational implications of television through the use of television studio equipment, utilizing the resources of all departments of the college, student potentialities, campus life, and the community. Actual training is given in the use of television equipment, planning, script writing, and programming in relation to classroom use on all grade levels in the schools. Trips are made to television laboratories and studios. Laboratory procedures are followed.

Credit: 2 semester-hours

EDUCATION 302B. *Television in Education Workshop, II*

This is a continuation of Ed. 302A, the experimental workshop course, and is designed for students on the undergraduate level who have had the basic foundations of television techniques. The course is devoted to an intensive study of the educational implications of television through the evaluation of current commercial offerings and to the production of experimental educational programs in various subject matter areas. Laboratory procedures are followed, and students are expected to select an area for specialized work. Students are also given the opportunity to gain further experience in fundamental techniques by serving as assistants to the instructors in the basic course.

Credit: 2 semester-hours

EDUCATION 400A. *Principles and Philosophy of Secondary Education*

This course evaluates educational objectives, techniques, procedures, and organizations in relation to the needs of the student. It aims to help the student develop an adequate philosophy of life and of education.

Credit: 2 semester-hours

EDUCATION 400B. *Practicum in Secondary Education*

This course follows student-teaching. It makes use of the teaching problems encountered by the students in the preceding twelve weeks, as well as similar problems reported by students in former years. In the manner of the clinic, cases are analyzed and diagnosed, and solutions are worked out. Examples of extraordinarily effective teaching procedures are similarly discussed.

Credit: 2 semester-hours

EDUCATION 406. *Educational Sociology*

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, socialized classroom methods, and the social approach to individual behavior difficulties.

Credit: 2 semester-hours

EDUCATION 407A. *Television in Education Workshop: Programming and Production*

This is a laboratory course designed to develop the techniques, methods, standards, procedures, and criteria pertaining to the special place of television in education. Through the utilization of studio equipment together with the resources of all the academic departments of the college, student potentialities, campus life, and the community, students receive experience in planning, developing, and producing, television programs of educational value. Actual training is given in the use of standard television equipment on campus, and field trips are made to local television laboratories and studios.

Credit: 2 semester-hours

EDUCATION 407B. *Television in Education Workshop: Classroom Utilization*

This course is designed to give training in the following areas of television education: types of programs best suited for classroom use; practical applications of programs emanating from commercial stations; various subject areas in which television might be used such as language, science, art, social studies, etc.; script writing; coordination of program and school schedules;

and the possible use of educational television stations and how they can best serve surrounding communities. Students are also introduced to the operation of both sending and receiving television equipment so that they may understand program possibilities and limitations.

Credit: 2 semester-hours

EDUCATION 408. *Selection and Utilization of Audio-Visual Materials*

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

Credit: 2 semester-hours

EDUCATION 409. *Radio and Sound Equipment in the Classroom*

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

Credit: 2 semester-hours

EDUCATION 410. *Teaching Materials Workshop*

This course is for those persons who wish to study advanced problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken EDUCATION 408 or will have had the equivalent in practical experiences.

Credit: 2 semester-hours

EDUCATION 411. *Educational Motion-Picture Workshop*

This course includes various phases of the planning and production of educational motion pictures. Students receive actual experience in scenario writing, costume research, set designing, lighting, photography, editing, and sound recording. During the course an educational film is produced as a class project.

Credit: 2 semester-hours

EDUCATION 420A and 420B. *The Community Centered School*

This course deals with the development and functions of the school as a community resource. Students assemble and interpret data relating to actual school and neighborhood situations. Consideration is given to the social framework in which the school operates; racial and national minorities; intercultural education; truancy and delinquency; and the discovery and utilization of community resources. The use of school personnel and facilities to deal with racial problems is treated in light of the data assembled.

Credit: 2 semester-hours each

EDUCATION 421A and 421B. *Leadership of Activities and Services in Community Education*

This course is designed to prepare teachers and others to give leadership to community-education activities. Starting with the assumption that the school should serve as a community center, members of the course proceed to learn about the various activities and programs that can be initiated and carried on by the school. Consideration is given to programming, utilization of space and personnel, and care of equipment. Techniques for organizing and directing special programs such as scouting, folk dancing, crafts, field trips, production of films, forums and debates, etc., are included.

Credit: 2 semester-hours each

EDUCATION 422A and 422B. *The Organization, Administration, and Supervision of Programs in Community Education*

This is a workshop type of course which emphasizes the integration of school, social, recreational, and adult education programs. The course presents a survey of current trends in community education as adopted and implemented by boards of education throughout the country. Principles, policies, practices, and problems related to the administration and supervision of community-education programs are surveyed. The following types of programs are considered: summer playgrounds, day camps, after-school centers, evening centers, youth and adult recreation centers.

Credit: 2 semester-hours each

EDUCATION 430. *Techniques for Improving Reading Abilities*

This course deals with the diagnosis and remedial treatment of difficulties in reading. A study is made of the basic principles underlying desirable reading experiences and their application in guiding children to success in learning to read adequately.

Credit: 2 semester-hours

EDUCATION 440. *Camping and Outdoor Education*

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

Credit: 2 semester-hours

EDUCATION 441. *Conservation Education*

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these resources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

Credit: 2 semester-hours

EDUCATION 442. *Practicum in Camp Leadership*

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

Credit: 2 semester-hours

EDUCATION 444. *Practicum in Conservation Education*

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participation in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion.

Prerequisite: EDUCATION 441, *Conservation Education*, or Science
412, *Field Studies in Science: Biological*, or Science
413, *Field Studies in Science: Physical*, or the equivalent

Credit: 2 semester-hours

EDUCATION 450. *Psychological Foundations of Personality*

This course is concerned with the physical, mental, and cultural bases underlying the formation of the personality of the individual. Emphasis is placed upon the implications for the teacher in developing understanding of the formation and measurement of personality.

Credit: 2 semester-hours

EDUCATION E460. *Public School Program of Studies*

This title is given to a group of courses designed to meet requests from public school systems desiring help in curriculum reconstruction. Each of the parts of this general course is given on a cooperative intercollege basis, and taught by specialists in the various fields selected from the faculties of the cooperating State Colleges. Certificates of credit are issued by the college sponsoring the work.

- Part I. 460A—Principles of Curriculum Revision
- Part II. 460B—Workshop in Curriculum Revision
- Part III. 460C—Organization and Evaluation of Curricula
- Part IV. 460D—The Social Studies Program of Studies
- Part V. 460E—The Language Arts Program of Studies
- Part VI. 460F—The Science Program of Studies
- Part VII. 460G—Workshop in Materials and Methods of Science Education
- Part VIII. 460H—The Mathematics Program of Studies

These cooperative intercollege courses are provided only when the requests from the public school authorities of the county, municipality, or community are such as to require their use. No undergraduate may elect these courses unless he is actively engaged in teaching.

Credit for each part: 2 semester-hours

EDUCATION E460I. *Public School Program of Studies***Part IX. *Testing and Evaluation in Instructional Program***

This course is a part of a group of courses designed to meet requests from public school systems desiring help in curriculum reconstruction and in upgrading of teacher personnel. The course is given as a workshop dealing with testing, test construction, evaluation of students, and evaluation of test results on teacher prepared tests. Practical classroom tests and actual teaching situations are considered.

Credit: 2 semester-hours

EDUCATION 461. *The Junior High School Curriculum*

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are the topics covered in this course. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

Credit: 2 semester-hours

ELEMENTARY EDUCATION COURSES

Although the Montclair State College is engaged primarily in preparing secondary-school teachers, during the present shortage of teachers in the elementary schools it is deemed expedient to offer courses in the field of elementary education for the undergraduates of the college leading toward certification to teach in these schools.

EDUCATION 472. *Elementary School Curriculum*

This course acquaints the College student with the subject-matter of the elementary school curriculum for grades 3-6 inclusive. In addition, the following are studied: (1) correlation among subjects, (2) the appraisal and use of textbooks, (3) the use of visual aids, (4) the methods adapted to each subject, and (5) use of course of study materials.

Credit: 2 semester-hours

EDUCATION 473. *Elementary School Language Arts*

This course gives an overview of modern practices that are used in teaching reading, creative writing, speaking, spelling, and handwriting in the elementary grades. Students are helped to recognize and to make provision for readiness for learning in these areas, to learn or devise various techniques that will meet the needs of different children and situations, and to evaluate, select, and create suitable materials to be used at various maturity levels. Special emphasis is placed on the functional use of the language arts in the total curriculum and life of the elementary-school child.

Credit: 2 semester-hours

EDUCATION 474. *Elementary School Arts and Crafts*

This course provides a wide range of creative manipulative experience with the materials, tools, and techniques of art work in the elementary school and an insight into significant art work of children of various age levels. Work is done in crayon, paint, chalk, clay, wood, papier-mache, finger paints, and other easily accessible materials. The work of the course includes simple weaving, block prints, murals, and the making of puppets. Attention throughout is directed toward an insight into the significance of art work and of manipulative

experience as a medium of expression and a means of growth for the child.

Credit: 2 semester-hours

EDUCATION 475A. *Fundamentals of Elementary School Music*

The elements of music, including notation, the formation of scales and various modes, key and clef signatures, Italian musical terms, abbreviations, rhythm, and intervals are included in this course. The student should acquire the ability to write a simple melody from dictation and to read at sight any part in a simple three-part selection in a musician-like manner. Ability to carry a tune is necessary for success in this course.

Credit: 2 semester-hours

EDUCATION 475B. *Teaching Elementary School Music*

This course is designed for students who are either music majors or music minors or who have an acceptable background in music. It deals primarily with the materials needed in elementary school music and applies the skills of persons who know music in the teaching of these materials. Students who are not accomplished in the musical field should enroll for EDUCATION 475A as a pre-requisite for this course.

Credit: 2 semester-hours

EDUCATION 476. *Elementary School Health and Physical Education*

The purpose of this course is to induct the prospective elementary classroom teacher into the field of health and physical education. Such phases as state courses of study, selection and organization of materials, grading, class organization, and others are discussed. To give the student a more functional approach, the programs of surrounding communities are studied.

Credit: 2 semester-hours

EDUCATION 477. *Elementary School Mathematics*

This course includes a study of the development of the number concept in young children, the problem of number readiness, and an analysis of the various number skills. Consideration is given to the development of methods of presenting the units of elementary mathematics to children. Emphasis is placed on the meaningful use of the fundamental operations with integers, fractions, decimals, and problem solving. Experience is given to students in effective methods of lesson planning, testing, and diagnostic and remedial work.

Credit: 2 semester-hours

EDUCATION 478. *Elementary School Science*

This course is based upon the assumption that science teaching in the elementary school should include scientific inquiry at the child's level as well as

scientific information. Specific methods and materials are developed to meet these purposes. Emphasis is placed upon using the school community, learning through activity, and integrating science with other subject-matter areas.

Credit: 2 semester-hours

EDUCATION 479. *Elementary School Social Studies*

This course is designed to familiarize the student with the materials and methods for teaching man's relation to his environment and other human beings in the elementary grades. The integration of the various phases of social living, with other subjects, grade placement of subject-matter, the source and use of visual aids, and student projects are all stressed.

Credit: 2 semester-hours

EDUCATION 480. *Field Science for Elementary Teachers*

Working in a natural setting, rather than an artificial laboratory, this course stresses firsthand experience with natural phenomena and suggests what can be done to convey an understanding of these things to the elementary-school student. In developing an understanding of natural resources consideration is given to such areas as rocks and minerals, plant and animal life, astronomy, weather, and all outdoor phenomena, both physical and biological. If desired, collections are made under supervision, and some latitude is provided for individual specialization in some phase of field science. The student needs no formal scientific background for this course. Methods of teaching on the elementary-school level as well as subject-matter content are included. Simple demonstrations, experiments, collections, acquisition of free and inexpensive materials, reference publications, and the most recent methods and trends in field-trip procedure are considered.

Credit: 2 semester-hours

PROFESSIONAL SUBJECT-MATTER COURSES

Fields of Specialization

Professional subject-matter courses offer opportunities for students to major in the Departments of Business Education, English, Fine Arts, Home Economics, Industrial Arts, Languages, Mathematics, Music, Physical Education and Hygiene, Science, Social Studies, and Speech, and to minor in the fields of Accounting and Business Practice, Biological Science, Physical Science, English, Geography, Health Education, History, Languages, Mathematics, Music, Physical Education, Political Science and Economics, Secretarial Studies, Social Business Studies, and Speech. The minimum requirement for a major is thirty semester-hours. The minimum requirement for a minor is eighteen semester-hours. Electives may be used outside the major and minor fields of interest, thereby increasing the areas of certification.

THE DEPARTMENT OF BUSINESS EDUCATION

The Montclair State College is now the only state college in the northern section of New Jersey that trains business-education teachers. As the result of a recent curriculum reorganization the Business Education Department now prepares teachers who are qualified to teach all of the business-education subjects usually offered in most high schools.

Every business-education major is certified to teach typewriting and the general business-education subjects. In addition, every major selects one of the following two areas of specialization: (1) accounting, (2) secretarial studies.

Students majoring in other departments of the College can minor in: (1) secretarial studies, (2) social business studies, (3) accounting.

All of the work in the Business Education Department is open to students who have never studied business-education subjects in high school. Students who can type, write Gregg shorthand, or do accounting with a reasonable degree of speed and accuracy may be exempt from the first courses upon the successful completion of placement examinations given during the first week of classes.

BUSINESS EDUCATION MAJOR

Specialization in Accounting

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100A/ <i>Survey of Physical Sci. or Sci. 100B Survey of Biological Sci.</i>	4
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2	Mus. 100 <i>Music Appreciation</i>	2
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Math. 300 <i>Social Uses of Mathematics</i>	2
B.E. 101 BUSINESS ORG. & MGT.	3	B.E. 104 TYPEWRITING, II	2
B.E. 103 TYPEWRITING, I	0		
	$16\frac{1}{2}$		$16\frac{1}{2}$

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior</i>	3	Ed. 202 <i>Human Dev. & Behavior</i>	3
Eng. 100G <i>Western World Literature</i>	3	H.Ed. 100 <i>Healthful Living</i>	2
Elective	2	Elective	2
B.E. 201 ACCOUNTING, I	3	B.E. 202 ACCOUNTING, II	3
B.E. 203 TYPEWRITING, III	$1\frac{1}{2}$	B.E. 408 BUSINESS FINANCE	3
Observations	0	Observations	0
	16		$16\frac{1}{2}$

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Elective	2	Elective	2
B.E. 305 BUSINESS LAW, I	3	B.E. 306 BUSINESS LAW, II	3
B.E. 301 ACCOUNTING, III	3	B.E. 204 TYPEWRITING, IV	
B.E. 409 CONSUMER EDUCATION	3	(Methods)	$1\frac{1}{2}$
Observations	0	B.E. 405 OFFICE PRACTICE—CLERICAL	3
	16	Observations	0
			$14\frac{1}{2}$

Supervised Work Experience—Summer—0

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective in Mathematics or Science	2	Ed. 4. <i>Education Elective</i>	3
Elective	2	Elective in Humanities	2
B.E. 401A MATERIALS & METHODS OF TEACHING GENERAL BUSINESS	3	Elective	2
B.E. 302 ACCOUNTING, IV (Methods)	4		
B.E. 308 ECONOMIC GEOGRAPHY	3		
Observations	0		
	17		15

Total semester-hours—128

BUSINESS EDUCATION MAJOR

Specialization in Secretarial Studies

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100A/ <i>Survey of Physical Sci. or</i>	4
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Sci. 100B <i>Survey of Biological Sci.</i>	2
F.A. 100 <i>Intro. to the Visual Arts.</i>	3	Mus. 100 <i>Music Appreciation</i>	2
B.E. 101 <i>BUSINESS ORG. & MGT.</i>	3	Math. 300 <i>Social Uses of Mathematics</i>	2
B.E. 103 <i>TYPEWRITING, I</i>	0	B.E. 104 <i>TYPEWRITING, II</i>	2
	16½		16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Elective	2	Elective	2
B.E. 201 <i>ACCOUNTING, I</i>	3	Eng. 100G <i>Western World Literature</i>	3
B.E. 203 <i>TYPEWRITING, III</i>	1½	H. Ed. 100 <i>Healthful Living</i>	2
B.E. 205 <i>STENOGRAPHY, I</i>	4	B.E. 206 <i>STENOGRAPHY, II</i>	3
Observations	0	Observations	0
	17		16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Elective	2	Elective	2
B.E. 305 <i>BUSINESS LAW, I</i>	3	B.E. 204 <i>TYPEWRITING, IV (Methods)</i>	1½
B.E. 303 <i>STENOGRAPHY AND TRANSCRIPTION, I</i>	3	B.E. 405 <i>OFFICE PRACTICE — CLERICAL</i>	3
B.E. 409 <i>CONSUMER EDUCATION</i>	3	B.E. 407 <i>OFFICE PRACTICE — SECRETARIAL</i>	3
Observations	0	Observations	0
	16		14½

Supervised Work Experience—Summer—0

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective in Mathematics or Science	2	Ed. 4.. <i>Education Elective</i>	3
Elective	2	Elective in Humanities	2
B.E. 401A <i>MATERIALS & METHODS OF TEACHING GENERAL BUSINESS</i>	3	Elective	2
B.E. 304 <i>STENOGRAPHY AND TRANSCRIPTION, II (Methods)</i>	3		15
B.E. 308 <i>ECONOMIC GEOGRAPHY</i>	3		
Observations	0		

16

Total semester-hours—128

Minors in the Department of Business Education

The following courses are required in the various business-education minor fields:

Secretarial Studies Minor Sequence for Majors in Departments Other Than Business Education

SOPHOMORE YEAR

Semester I

Bus. Ed. 103 *Typewriting, I* 0*
Bus. Ed. 205 *Stenography, I* 4*

Semester II

Bus. Ed. 104 *Typewriting, II* 2*
Bus. Ed. 206 *Stenography, II* 3*

JUNIOR YEAR

Bus. Ed. 203 *Typewriting, III* 1½
Bus. Ed. 303 *Stenography & Transcription, I* 3

Bus. Ed. 204 *Typewriting, IV*
(Methods) 1½

Bus. Ed. 405/ *Office Practice—Clerical* or Bus. Ed. 407 *Office Practice—Secretarial* 3

SENIOR YEAR

Bus. Ed. 304 *Stenography & Transcription, II* (Methods) 3

* May be waived by permission from the Department Chairman and other business electives substituted.

Social Business Minor Sequence for Majors in Departments Other Than Business Education

SOPHOMORE YEAR

Semester I

Bus. Ed. 101 *Bus. Org. & Mgt.* ... 3

Semester II

Bus. Ed. 408 *Business Finance* 3

JUNIOR YEAR

Bus. Ed. 305 *Business Law, I* 3
Bus. Ed. 409 *Consumer Education*.. 3

Bus. Ed. 306 *Business Law, II* 3

SENIOR YEAR

Bus. Ed. 401A *Materials & Methods of Teaching General Business* .. 3
Bus. Ed. 308 *Economic Geography*.. 3

Accounting Minor Sequence for Majors in Departments Other Than Business Education

SOPHOMORE YEAR

Semester I

Bus. Ed. 201 *Accounting, I* 3*

Semester II

Bus. Ed. 202 *Accounting, II* 3*

JUNIOR YEAR

Bus. Ed. 301 *Accounting, III* 3
Bus. Ed. 305 *Business Law, I* 3

Bus. Ed. 408 *Business Finance* 3

SENIOR YEAR

Bus. Ed. 302 *Accounting, IV*
(Methods) 4
Bus. Ed. 401A *Materials & Methods of Teaching General Business* .. 3

* May be waived by permission from the Department Chairman and other business electives substituted.

All students majoring in the Business Education Department must complete ten weeks (400 hours) of practical business experience for certification. Specific directions are given by the Chairman of the Department.

All business-education majors also must observe business-education classes in various high schools. The details of this program are supplied by the Chairman of the Department.

All students majoring in the Business Education Department are required and all students minoring in the Department are invited to participate in the extra-curricular programs planned by the Department. Epsilon Mu Epsilon is the departmental club with membership open to all majors and minors. Students are given opportunities for leadership and social activities. Outstanding students receive invitations to become members in the Beta Sigma Chapter of Pi Omega Pi, the National Honorary Business Education Society.

FRESHMAN YEAR

BUSINESS EDUCATION 101. *Business Organization and Management*

This course is an introduction to the world of business. It goes into the functions of business, bank service, credit, investments, insurance, forms of business organization, personnel problems, transportation and communication.

Credit: 3 semester-hours

*BUSINESS EDUCATION 103. *Typewriting, I*

This is a course for freshman students who have had no previous typewriting instruction, or for those who have had typewriting in high school but who have failed to meet the placement examination standards. The keyboard is mastered by word-building and sentence-building techniques. Speed in typing these words and sentences is emphasized from the start, and accuracy is developed simultaneously by individual analysis of errors. At the end of the semester, the student has a basic facility in typing from straight copy, in setting up paragraph material in medium-length letters accurately on a business letterhead, and in typing term papers. With this training, the student should be able to use the typewriter for personal typing problems. This course meets for four periods per week.

No credit, first semester

*BUSINESS EDUCATION 104. *Typewriting, II*

The aim of this course is to increase the typing speed and ability of the student by stressing the need for accuracy in all material typed. Emphasis is placed upon expert proof reading before releasing any papers for approval by the instructor. Advanced letter forms, such as the block, full block, five-indent, and all variations of the modified block, are applied at frequent intervals to insure thorough recall. This course meets for four periods per week.

Credit: 2 semester-hours

* May be waived by permission from the Department Chairman and other business electives substituted.

SOPHOMORE YEAR***BUSINESS EDUCATION 201. *Accounting, I***

This is a basic course in accounting. It is designed for the student who has never studied bookkeeping. Emphasis is placed on developing a thorough understanding and mastery of the fundamental elements of bookkeeping and accounting. After analyzing the elementary accounting equations, the student learns to journalize, post, take a trial balance, and prepare financial statements, as applied to the sole proprietorship form of organization. Adequate training is provided through the use of numerous exercises and constant emphasis on developing an understanding of sound accounting theory and practice.

Credit: 3 semester-hours

BUSINESS EDUCATION 202. *Accounting, II

This course starts with a thorough review of the accounting cycle. The student learns to use special journals, controlling accounts, work sheets, classified statements, reserves, accruals, deferred items, reversals, special columns, and business papers. Special attention is given to the use of the voucher system, pay-roll accounting, and accounting for taxes. Thorough analysis is made of partnership formation and operation, as well as partnership reorganization and dissolution.

Prerequisite: BUSINESS EDUCATION 201

Credit: 3 semester-hours

BUSINESS EDUCATION 203. *Typewriting, III*

Mastery of the keyboard and remedial treatment of any deficiencies in basic typewriting skills are emphasized in this course. Additional speed and accuracy are developed. Much time is spent on office typewriting skills including handling multiple carbons, preparing invoices, and other business forms. This course meets for three periods per week.

Credit: 1½ semester-hours

BUSINESS EDUCATION 205. *Stenography, I

The theory of Gregg stenography (Simplified) is taught in this beginning course. The student learns to read shorthand fluently and to take dictation on familiar material.

Credit: 4 semester-hours

BUSINESS EDUCATION 206. *Stenography, II

Gregg shorthand theory (Simplified) is thoroughly reviewed, and unfamiliar dictation is given at moderate speeds. At the same time vocabulary building is emphasized.

Prerequisite: BUSINESS EDUCATION 205 or college equivalent

Credit: 3 semester-hours

* May be waived by permission from the Department Chairman and other business electives substituted.

BUSINESS EDUCATION 408. *Business Finance*

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stock, borrowed capital, mortgages, bonds, and notes are solved.

Credit: 3 semester-hours

Elective**BUSINESS EDUCATION 208. *Salesmanship***

The principles of salesmanship in all types of selling activities are discussed. They are amplified and strengthened by individual selling demonstrations which require intensive study of the product to be sold in the demonstration and careful analysis of the desirable techniques for its sale. Visual aids and talks by salesmen, sales managers, and retail training directors add interest and purposefulness to the course.

Credit: 3 semester-hours

JUNIOR YEAR**BUSINESS EDUCATION 204. *Typewriting, IV (Methods)***

This course is a continuation of BUSINESS EDUCATION 203. It also includes the methods of teaching typewriting. This course meets for three periods per week.

Credit: 1½ semester-hours

BUSINESS EDUCATION 301. *Accounting, III*

In this advanced course there is emphasis on all phases of corporate accounting, including: the formation of corporations; corporate accounts and records; corporate surplus and dividends; and corporate stocks and bonds. Departmental and branch accounting are carefully presented through exercises and laboratory problems.

Prerequisites: BUSINESS EDUCATION 201 and BUSINESS EDUCATION 202

Credit: 3 semester-hours

BUSINESS EDUCATION 303. *Stenography and Transcription, I*

The emphasis in this course is upon the transcription of shorthand notes into typed copy. Considerable attention is paid to sentence structure, correct grammar, spelling, and the development of good typewriting techniques. The dictation speed for new material increases as the course progresses.

Prerequisites: BUSINESS EDUCATION 205, BUSINESS EDUCATION 206, or college equivalent

Credit: 3 semester-hours

BUSINESS EDUCATION 305. *Business Law, I*

The purpose of this course is to acquaint the student with the laws relating to everyday business transactions. It includes such topics as: court systems, contracts, agency, employer-employee relationships, negotiable instruments, bailor and bailee, carriers, and shippers.

Credit: 3 semester-hours

BUSINESS EDUCATION 306. *Business Law, II*

This course is a continuation of BUSINESS EDUCATION 305. It covers sales, partnerships, property, deeds, mortgages, landlord and tenant, and torts.

Credit: 3 semester-hours

BUSINESS EDUCATION 405. *Office Practice—Clerical*

Office machines commonly used by the bookkeeper and clerical worker are studied in this course. Actual training is given on the 10-key and full keyboard adding listing machines, the rotary and key-driven calculating machines, and the posting machine. Other office skills necessary for the clerical worker to possess are stressed. Limited instruction is provided on the voice-writing and duplicating equipment.

Techniques of job analysis, including job description, job breakdown, and job evaluation are practiced.

Credit: 3 semester-hours

BUSINESS EDUCATION 407. *Office Practice—Secretarial*

The secretary must be acquainted with office procedure and must be able to operate many different office machines. This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied, with considerable attention being paid to filing. Understanding of office procedures and stenographic skill are strengthened through supervised office assignments and class work projects.

Credit: 3 semester-hours

BUSINESS EDUCATION 409. *Consumer Education*

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and the development of intelligent techniques for buying and using consumer goods and services.

Credit: 3 semester-hours

SENIOR YEAR**BUSINESS EDUCATION 302. *Accounting, IV* (Methods)**

Manufacturing and cost accounting procedures are presented with complete analysis for the advanced student of accounting. Both the accounting for manufacturing operations as well as procedures in the preparation of the periodic summary for a manufacturing enterprise are considered. Job order and process cost accounting are studied in detail as well as the problems of budgets, and the analysis and interpretation of financial statements. The methods of teaching bookkeeping are included in this course.

Prerequisites: BUSINESS EDUCATION 201, BUSINESS EDUCATION 202,
BUSINESS EDUCATION 301

Credit: 4 semester-hours

BUSINESS EDUCATION 304. *Stenography and Transcription, II* (Methods)

Both transcription and stenographic skills are improved in this course. Shorthand theory is thoroughly reviewed and tested. Office-style dictation supplants some of the conventionally timed dictation. The methods of teaching secretarial subjects are included in this course.

Prerequisites: BUSINESS EDUCATION 205, BUSINESS EDUCATION 206,
and BUSINESS EDUCATION 303

Credit: 3 semester-hours

BUSINESS EDUCATION 308. *Economic Geography*

This course includes a study of the natural geographic areas of the world and the trade routes between these areas. Emphasis is given to the influence that natural environment has upon production, trade, and the utilization of important agricultural, forestry, mineral, and manufactured commodities.

Credit: 3 semester-hours

BUSINESS EDUCATION 401A. *Materials and Methods of Teaching General Business*

Consideration is given to the methodology of teaching the basic business subjects, including general business, business law, and consumer education. Content, lesson planning, visual aids, and evaluation procedures are considered for each subject. A test of subject-matter competency in each field is required.

Credit: 3 semester-hours

Electives**BUSINESS EDUCATION 401B. *Methods of Teaching Bookkeeping and Accounting***

A brief study is made of the history and development of bookkeeping instruction and materials, and aims and objectives in the light of current

trends. Special attention is given to the problems of textbook selection, lesson planning, classroom and teaching procedures, tests and measurements, audio-visual and other teaching aids. Opportunities are given students to present lessons for criticism and evaluation. A test of subject-matter competency is required.

Prerequisite: 12 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 401C. *Methods of Teaching Secretarial Studies*

Techniques of teaching beginning stenography, advanced dictation and transcription, secretarial training, and clerical practice are provided in this course. Attention is given to the latest teaching materials, audio-visual aids, equipment, and supplies.

Teaching the skills of the clerical and secretarial worker is stressed; in addition, the traits, attitudes, work habits, and understandings which, if developed, permit an office worker to make a real contribution to the business world and to society are analyzed. The unique opportunities present in the preparation of the secretarial worker for service to the school and to the community are surveyed. A test of subject-matter competency in each field is required.

Credit: 2 semester-hours

BUSINESS EDUCATION 403. *Advanced Dictation and Transcription, II*

This course is designed for the teacher of stenography and transcription who wishes to study the problems of dictation and transcription from the viewpoint of his own class situation and also to improve his skill.

Those who take this course should have had a methods course in stenography and have had at least student-teaching experience.

Credit: 2 semester-hours

BUSINESS EDUCATION 404. *Business Economics*

This course deals with the business aspects of economics as related to immediate and long-range post-war problems; operation and government control of public utilities; taxation, government finance, and labor and management problems.

Credit: 2 semester-hours

BUSINESS EDUCATION 406. *Advertising, I*

This course aims to acquaint the student with the social and economic aspects of advertising so that a fair evaluation may be made of its worth as well as its undesirable aspects. Copy appeals, the writing of copy, advertising layouts, and the selection of appropriate types of media for various advertisements are considered. Emphasis is placed on the research aspects of the subject so important today.

Credit: 2 semester-hours

BUSINESS EDUCATION 410. *Advanced Accounting*

This is an advanced course for students who have had two years of accounting. Emphasis is placed on techniques of problem solving. Included are problems relating to basic accounting principles, cost accounting, and intermediate accounting. Considered are the determination of net income on accrual, cash and installment bases; problems of valuation, including problems of depreciation, depletion, and amortization; consignments; preparation and analysis of financial statements, including analysis of net change in gross profit and net change in working capital; partnership formation, operation, dissolution, and liquidation; bankruptcy, reorganization, and recapitalization, and consolidated balance sheets and income statements.

Prerequisites: BUSINESS EDUCATION 201, BUSINESS EDUCATION 202,
BUSINESS EDUCATION 301, and BUSINESS EDUCATION
302

Credit: 2 semester-hours

BUSINESS EDUCATION 411. *Tax Accounting*

The purpose of this course is to give a comprehensive picture of the Federal Tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in the filing of individual tax returns are carefully studied. Opportunity is provided for the student to master the problems encountered in completing individual tax returns.

Prerequisite: 12 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 412. *Project Development in Consumer Education*

This course permits the student to explore in a specialized fashion two major areas of consumer education. Two projects are developed, one on housing and the other on the furnishing of a home. The basic purposes of this course are to illustrate the handling of material and the procedures that might be used in developing other consumer education units.

Prerequisite: An undergraduate course in consumer education or economics

Credit: 2 semester-hours

BUSINESS EDUCATION 414. *Merchandising, I*

This course analyzes the problems of how, what, where, and when to buy; the terms of purchasing, tested receiving and marketing procedures; the mathematics of merchandising—setting the retail price, planning mark-up and mark-down; and inventory controls. It is designed to assist the teacher of the prospective or actual small businessman.

Credit: 2 semester-hours

BUSINESS EDUCATION 417. *Marketing*

Marketing is the process of transferring goods from the producer to the consumer. The functions involved in the process, the various channels of distribution, marketing institutions, and the costs of marketing are considered in this course. Such topics as auctions, produce exchanges, wholesalers, retailing, department and mail-order stores, chain stores, cooperatives, profits and prices are included.

Credit: 2 semester-hours

BUSINESS EDUCATION 418. *Retail Store Management*

The work of the store manager in retail store operation is fully explored in this course. The problems of organization and management as they are encountered in various types of retail stores are discussed. Consideration is given to trends, principles, and practices in small and large stores in both the independent and chain-store fields.

Credit: 2 semester-hours

BUSINESS EDUCATION 420. *Field Studies in Business Education*

This orientation course aims to introduce business-education students, through direct observational techniques, to the realities of the business world. Six field trips are made in the New York Metropolitan Area which include visits to business organizations where the following types of business activity or relationships may be observed: production; merchandising and advertising; finance; transportation and communication; employer-employee relationships; government and business relationships. The field trips are supplemented by regular class sessions where discussions are held and visual aids presented to make the visits more meaningful.

Credit: 2 semester-hours

BUSINESS EDUCATION 421. *Finance and Investments for Families*

This course applies the principles of budgeting, banking, insurance, finance, and investments to the complicated problems facing individuals and families in these areas. It deals with budgets; savings; banking; life insurance; general insurance annuities; pensions; wills; such investments as stocks, bonds, and mutual funds; homes; and small business enterprises.

Credit: 2 semester-hours

THE DEPARTMENT OF ENGLISH

The English Department serves the entire college by offering certain courses in composition, and literature which are required of all students. It offers other courses which may be taken as electives by students who are preparing to teach in any field, and a four-year program of those students who choose the subject as a major field of specialization.

THE FIRST YEAR

The English major begins his college study of English with a survey course in *World Literature* which gives him an over-view of the development of Western Culture and provides background for his reading and thinking on aesthetic, ethical, social, and political problems. He also takes the course in *The Language Arts* so that he may study the problems inherent in the communication of meanings through linguistic symbols and be better prepared to study and teach the uses of language. He also takes the course in *Drama from the Miracle Plays to O'Neill*.

General Education Courses**ENGLISH 100C. *Fundamentals of Writing***

For a description of this course, see page 48.

Credit: 3 semester-hours

ENGLISH 100G. *Western World Literature*

For a description of this course, see page 48.

Credit: 3 semester-hours

English Major Courses**ENGLISH 100A and 100B. *World Literature: Its Forms and Its Masters***

The purpose of this course is to acquaint the student, by extensive reading and intensive discussion, with major works of world literature, as he reads from Oriental antiquity into the Twentieth Century. The student, thus, acquires a fundamental background for his subsequent courses which gives him a comprehensive perspective of the main current of the world's literary traditions. The work of the first semester ranges from Oriental writings through the Graeco-Roman and Medieval periods to the Renaissance. The work of the second semester ranges from the Renaissance to approximately the present.

Credit: 3 semester-hours each

ENGLISH 101. *The Language Arts*

This course is designed to give the student a scientific understanding of the uses of language, to the end that he may learn to interpret more intelligently the meanings conveyed through human speech and writing—including prose, poetry, and propaganda—and may be better equipped to teach high-school students to write, read, speak, and listen more comprehendingly. The student's own practices in oral and written English furnish much of the clinical material of the course.

Credit: 3 semester-hours

ENGLISH 102. *Drama from the Miracle Plays to O'Neill*

This course is concerned with the historical development of English drama from its beginning to the present day and analysis of the characteristics of drama as a literary form. Considerable emphasis is given to the contemporary drama.

Credit: 3 semester-hours

THE SECOND YEAR**ENGLISH 200C. *Advanced Composition***

This advanced course—aimed to develop competence in the communication of ideas—provides experience in writing short themes, reports, and term papers. Various resources of form and structure, such as personal narrative, poetry, exposition, and persuasion are developed. Exercises in analysis and revision are planned in order to increase the writer's control of sentence structure, vocabulary, and grace in writing. Examples of student writing are read in class and criticized by the group. Individual problems are discussed in conference.

Credit: 2 semester-hours

ENGLISH 201. *American Literature, I*

Covering the period from the beginning to the Civil War, this course relates literary works to the political and social backgrounds from which they come, and traces American literature as a record of events and influences in the formation of a new nation in the western world.

Credit: 3 semester-hours

ENGLISH 202. *American Literature, II*

This course is a continuation of ENGLISH 201. ENGLISH 202 covers the period from the Civil War to the present day. Still concerned with the relation of literature to political and social backgrounds, the course gives added attention to aesthetic values and to the emergence of literature as an art.

Credit: 3 semester-hours

THE THIRD YEAR**ENGLISH 301A. *Literature for Adolescents***

A study of the reading interests of different age levels introduces problems involved in the selection of literature for students from the fifth through the twelfth grades. Reading and analysis of literature for children as well as for the young adolescent are required.

Credit: 2 semester-hours

ENGLISH 301B. *Shakespeare's Major Plays*

The plays of Shakespeare which are most frequently taught in the high school are studied. Discussion of Shakespeare's conception of tragedy and comedy, his dramatic art, the sources of his plays, staging in Shakespeare's theatre and in our own, and typical textual problems, provides the student with a background for teaching Shakespeare in the secondary school.

Credit: 3 semester-hours

ENGLISH 303. *Poetry from Chaucer to Frost*

This course surveys the development of English poetry from its beginnings to the present time. Its study includes the types of poetic statement, the historical development of the styles and forms of English poetry, the life and work of the major British and American poets, and the critical appreciation of poetry as an art and as an expression of life.

Credit: 3 semester-hours

ENGLISH 304. *British and American Fiction*

This course is designed primarily to acquaint the student with the great novels of English and American literature from Defoe to Hemingway. A second major objective is to guide future teachers in the selection and treatment of novels suitable to high-school students of varying age levels and social backgrounds.

Credit: 3 semester-hours

Elective

ENGLISH 310. *Journalism*

This course is designed to qualify the student to teach high-school journalism. Its aim is to give the student training in recognizing news; gathering it; and preparing it for print, including copyreading, headline writing, proof-reading, and page make-up. The course assumes little or no previous journalistic training.

Credit: 2 semester-hours

THE FOURTH YEAR

In its major purposes the fourth year looks forward to the student-teaching experience. The Department offers a detailed, chronological *Survey of British Literature* which demands intense and precise scholarship.

The Teaching of English implements the professional study which has been stressed continuously throughout the student's college career. By discussion, by daily observations, and by participation in the College High School, the meaning of those professional ideas and ideals that have been urged is demonstrated.

ENGLISH 401. *The Teaching of English in Secondary Schools*

Students are taught to develop and use materials of the classroom; lesson plans and units of work are prepared and presented for criticism; textbooks are analyzed for training in their use; and bulletin board exhibits and visual education materials are prepared by students for the class. Observation and criticism of teaching in the College High School, and criticism of student compositions are required.

Credit: 3 semester-hours

ENGLISH 401X. *The Teaching of English in Secondary Schools*

Students are taught to develop and use materials of the classroom; lesson plans and units of work are prepared and presented for criticism; textbooks are analyzed for training in their use; and bulletin board exhibits and visual education materials are prepared by students for the class. This course is offered only in summer sessions.

Credit: 2 semester-hours

ENGLISH 402. *Survey of British Literature to 1798*

This course draws together into a systematic narrative the story of the development of English literature from the beginnings to the romantic triumph in 1798.

Credit: 3 semester-hours

ENGLISH 419. *Grammar for Teachers*

This course is a study of the basic facts of grammatical relationships in English, and of the current problems of "rules" as opposed to "usage." The primary aim of the course is to acquaint students with the true functions of grammar in speech and writing.

Credit: 2 semester-hours

Electives**ENGLISH 404. *Survey of British Literature***

This course is a continuation of English 402. It takes up the story with the romantic triumph in 1798 and continues it to the present time.

Credit: 2 semester-hours

ENGLISH 407. *British and American Biography*

Both the old and new types of biography are read and studied in this course, with emphasis upon the Nineteenth and Twentieth Centuries. Biography is presented for its cultural and informational values, for its use in integrating the work of the various departments in the high school, and for its direct help in the vocational guidance program.

Credit: 2 semester-hours

ENGLISH 408. *Creative Writing*

Students in this course attempt seriously the standard literary forms in prose and verse. Each student is assisted in finding his own best field of writing, and is given further training in that field. The course is based entirely upon the needs of the class as revealed in student-written manuscripts. Much time is devoted to criticism and to discussion of mutual problems. Wherever possible, the course is made to reflect methods of creative teaching in the field of composition.

Credit: 2 semester-hours

ENGLISH 420. *High School Classics*

This course is a seminar for prospective student teachers on the problems of teaching literature in high schools. The student reads numerous articles on the "classics" vs. "moderns" controversy, becomes thoroughly acquainted with the contents and aims of the best high school anthologies currently in use, and builds up a working philosophy for his own teaching. Through the continual practice of reporting and discussion leading, the student is enabled to integrate his total experience in college.

Credit: 2 semester-hours

ENGLISH 421. *The Short Story*

The course traces the history of the short story as an evolving literary form, emphasizing the productions of the Nineteenth and Twentieth Centuries. Many stories are analyzed for both human and literary values. Professional use of the short story is the guiding purpose in the conduct of the course.

Credit: 2 semester-hours

ENGLISH 428. *The Film and Society*

This course considers the impact of the motion picture on our culture. The film is studied and evaluated as a powerful social and educative force, as an art form, and as an entertainment medium. The origin and development of film techniques are treated, and films are shown at each session, accompanied by analysis and discussion. The scenario as a literary type and the adaptation of prose fiction for film purposes are included in the course content.

Credit: 2 semester-hours

ENGLISH 430. *Reading in Secondary Schools*

After examination of recent research concerning reading activities at various age levels, the class undertakes to evaluate methods devised to develop reading skills, to increase vocabularies, and to improve the comprehension of secondary-school students.

Credit: 2 semester-hours

ENGLISH 432. *The Development of the Drama*

The development of the drama is studied in all periods from ancient Greece and Rome through the Middle Ages and the Renaissance to the beginning of modern drama with Ibsen. The emphasis of the course is placed on the major characteristics of the drama and its necessary complement, the theatre. Representative plays are read and discussed.

Credit: 2 semester-hours

ENGLISH 446. *The One-Act Play*

This course studies the one-act play as an art form, devoting special attention to plays which are suitable for high school production.

Credit: 2 semester-hours

ENGLISH 451. *Literature and Art in Western Culture*

This course deals with the nature of literature and considers its importance as a factor in the development of international understanding. It deals with the relation between the use of language in literature and with the methods of art since the re-creation of experience is a function common to both. Through reading the literature which is being read by our neighbors today, both in Europe and in the Western Hemisphere, students are able to participate in a common experience with them.

Credit: 2 semester-hours

ENGLISH 459. *A Survey of Great Chinese Literature*

Some of the contributions which have gone into the making of Chinese literature, such as the *Book of Odes* of Confucius, the poems of Li Po and Tu Fu, the Lute Song, and the *Dream of the Red Chamber*, are considered in this course. Aside from a general survey of the great literature of China, special attention is given to English translations of the masterpieces of Chinese literature. There are twenty-four hours of lectures in the morning; after lunch each day a period of forty-five minutes is devoted to informal talks, story-telling, singing of Chinese songs, and showing of motion pictures. During the workshop period individual students work on specific topics under the guidance of the instructor.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

THE DEPARTMENT OF SPEECH

THE SPEECH MAJOR

The speech of every student is important. To insure optimum development in this respect, more school administrators are recognizing the contribution that can be made by specially trained speech teachers. Such training at Montclair recognizes the joint contribution of both the speech science and the

speech arts aspects of the field. Thus, the speech major program prepares the prospective teacher to do speech correction and improvement work with students on all grade levels, and to teach and direct dramatics, public speaking, oral interpretation, and general speech throughout the secondary school. The program meets New Jersey certification requirements in two areas, Teaching the Speech Defective and Teaching Speech and Dramatics from grades 7 through 12, as well as clinical membership in the American Speech and Hearing Association.

Class work is supplemented by field trips, speech surveys in New Jersey communities, laboratory teaching experience with fellow students and children who come to the campus for special help, and general speech activity of all types in one of the finest buildings for speech and dramatics in the East. Players, a society open to the entire student body, provides extensive opportunities in the field of dramatics. The Montclair Zeta Chapter of the national speech correction honor society, Sigma Alpha Eta, is one of the country's most active organizations in that area.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i> ..	3	Mus. 100 <i>Music Appreciation</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Sci. 100A/ <i>Survey of Physical Sci. or</i>	4
SPEECH 103 <i>VOICE AND SPEECH IMPROVEMENT</i>	3	Sci. 100B <i>Survey of Biological Sci.</i>	
SPEECH 105A <i>INTRO. TO DRAMATIC PRODUCTION, A</i>	2	Eng. 100C <i>Fundamentals of Writing</i>	3
SPEECH 106 <i>INTRO. TO ORAL INTERPRETATION</i>	2	SPEECH 105B <i>INTRO. TO DRAMATIC PRODUCTION, B</i>	2
		SPEECH 104 <i>INTRODUCTION TO PHONETICS</i>	2
	$15\frac{1}{2}$		$16\frac{1}{2}$

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Sci. 100C <i>The Earth Sciences</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Electives	3	Electives	3
SPEECH 208 <i>ANATOMY AND PHYSIOLOGY OF THE VOCAL AND AUDITORY MECHANISMS</i>	3	SPEECH 204 <i>INTRO. TO PUBLIC SPEAKING</i>	2
SPEECH 435 <i>STAGECRAFT</i>	2	SPEECH 209 <i>SPEECH CORRECTION: THEORIES AND PRACTICES</i>	2
	$16\frac{1}{2}$		$15\frac{1}{2}$

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Math. 400 <i>Statistics</i>	2
Electives	6	Elective	2
SPEECH 410 <i>SPEECH PATHOLOGY</i>	3	Eng. 100G <i>Western World Literature</i>	3
SPEECH 461A <i>APPLIED SPEECH CORRECTION</i>	2	SPEECH 457 <i>DIRECTING THE ASSEMBLY PROGRAM</i>	2
	16	SPEECH 461B <i>APPLIED SPEECH CORRECTION, ADVANCED</i>	2
		SPEECH 464 <i>PSYCHOLOGY OF ORAL COMMUNICATION</i>	2
			16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Lang. 300 <i>Foundations of Language</i> ..	2	Ed. 4.. <i>Education Elective</i>	3
Electives	7	Elective—Mathematics or Science..	2
SPEECH 417 <i>METHODS IN THE TEACHING OF SPEECH</i>	3	Elective—Humanities	2
SPEECH 456 <i>PLAY DIRECTION</i>	2		15
	17		

Total: 128 semester-hours

Nine semester-hours are to be used to develop a concentration in a second teaching field.

THE SPEECH MINOR

Eighteen semester-hours of work, chosen from the following courses according to these stated requirements, constitute the speech minor. The requirements for the speech minor may be met by the following courses:

1. **SPEECH FUNDAMENTALS**—5 semester-hours required
Take Speech 104, *Introduction to Phonetics*, and
Speech 208, *Anatomy and Physiology of the Vocal and Auditory Mechanisms*
2. **PUBLIC SPEAKING**—2 semester-hours required
Take Speech 204, *Introduction to Public Speaking*
3. **INTERPRETATION**—2 semester-hours required
Take Speech 106, *Introduction to Oral Interpretation*, or
Speech 448, *Choral Speaking*
4. **DRAMATICS**—2 semester-hours required
Take Speech 105A or 105B, *Introduction to Dramatic Production, A or B*, or
Speech 435, *Stagecraft*, or
Speech 456, *Play Direction*
5. **SPEECH CORRECTION**—5 semester-hours required
Take Speech 209, *Speech Correction: Theories, and Practices*, and
Speech 410, *Speech Pathology*

6. METHODS—3 semester-hours required

Take Speech 417, *Methods in the Teaching of Speech*

SEQUENCES OF COURSES**A. Required Sequences**

Speech 103 during the first half of the freshman year—prerequisite to other speech courses

Speech 208 in first half of sophomore year—Prerequisite to Speech 209 and Speech 410

Speech 209 before or with Speech 410

B. Recommended Sequences

Speech 204 before Speech 449

Speech 105A and B before Speech 435 or 456

Possible elections in speech for those desiring more than the minimum requirements listed above include the following courses:

Speech 454, *Training the Speaking Voice*

Speech 457, *Directing the Assembly Program*

Speech 461A, *Applied Speech Correction*

Speech 461B, *Applied Speech Correction: Advanced*

Speech 463, *Audio-Visual Aids in Teaching Speech*

Speech 465, *Speech Arts Activity*

Transfer students please confer with a member of the speech faculty regarding courses taken elsewhere which can be accepted as fulfilling any of the above requirements.

THE SPEECH MAJOR—THE FIRST TWO YEARS

During the first two years the speech major is given experience in elementary courses in oral reading, public speaking, acting, dramatic production, voice improvement, and phonetics.

SPEECH 103. *Voice and Speech Improvement*

This course affords an opportunity for the students to develop their own voice and speech techniques and to eliminate faults. Consideration is also given to the procedures to use in helping others to improve voice and speech patterns.

Credit: 3 semester-hours

SPEECH 104. *Introduction to Phonetics*

This course gives the students an acquaintance with the science of speech sounds. They learn to use the International Phonetic Alphabet as well as diacritical marks of lexicographers. The symbols are used both in transcribing and in reading from transcriptions.

Credit: 2 semester-hours

SPEECH 105A and 105B. *Introduction to Dramatic Production*

This course is designed for speech majors and others who want to have a general knowledge of the various aspects of producing plays. The work of the first semester is devoted to the technical aspects in the production of a play; the work of the second semester covers the problems of the performer in a play. During the first half of the course topics covered are theater structure; the business side of production; the technical problems of scenery, lighting, properties, and costuming. At the conclusion of the first semester the students make practical use of the material by handling the simple staging of the one-act plays being produced by students in the course in play direction. The work of the second semester covers beginning problems and techniques of acting and a concentrated study of make-up. The work is concluded by a performance of a scene or character rehearsed in class and made up by the performer himself for his final demonstration.

Credit: 2 semester-hours each

SPEECH 106. *Introduction to Oral Interpretation*

This course is organized to increase the student's appreciation of literature in the area of his special interest. The emphasis is on individual classroom performances followed by informal critiques, and the development of a repertory for specific classroom purposes.

Credit: 2 semester-hours

SPEECH 204. *Introduction to Public Speaking*

The student studies techniques for preparing and delivering effective informative, persuasive, and entertaining speeches. He is given several opportunities to address the class and enter into informal critiques, as well as moderate one program.

Credit: 2 semester-hours

SPEECH 208. *Anatomy and Physiology of the Vocal and Auditory Mechanisms*

This course presents a study of the structures of the vocal and auditory mechanisms and of their functioning in producing speech sound and in detecting sound. Consideration is given to the fundamental principles of the physics of sound.

Credit: 3 semester-hours

SPEECH 209. *Speech Correction: Theories and Practices*

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary, and secondary school levels. Consideration is given to the following: (1) subject-matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations

with children who have faulty patterns of speech or whose speech development has been retarded are provided.

Credit: 2 semester-hours

SPEECH 435. *Stagecraft*

This workshop course provides training in constructing and painting of scenery and lighting the stage. A minimum of twelve clock hours in the scene shop is required.

Credit: 2 semester-hours

THE THIRD YEAR

During the third year the speech major is introduced to speech laboratory work under careful supervision, and learns the psychological principles of speech acquisition, as well as oral communication.

SPEECH 410. *Speech Pathology*

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances including severe stuttering, dysphonia, laryngectomy, cleft-palate, cerebral palsy, and aphasia. Emphasis is placed upon methods of diagnosis, evaluation, and rehabilitation.

Credit: 3 semester-hours

SPEECH 457. *Directing the Assembly Program*

It is the purpose of this course to prepare students to organize and to conduct assembly programs and similar activities. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares a detailed script for one assembly or commencement program.

Credit: 2 semester-hours

SPEECH 461A. *Applied Speech Correction*

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy, and teach under supervision.

Credit: 2 semester-hours

SPEECH 461B. *Applied Speech Correction: Advanced*

Additional opportunities for practical experience with children and high-school students who have speech problems are provided in this course. Provisions are made for qualified students to participate in specialized laboratory experiences which include audiometric testing, planning and supervising speech

therapy for small groups of children, demonstrating model lessons for beginning students, and interviewing applicants for admission to the laboratory.

Credit: 2 semester-hours

SPEECH 464. *Psychology of Oral Communication*

This course is divided into three major units: (1) speech and personal adjustment, (2) the psychology of children who have problems in oral communication in addition to their physical and/or emotional handicaps, and (3) programs and problems in the education and rehabilitation of handicapped children who have speech and/or hearing disorders. Consideration is given to ways in which psychologies of learning, psychoanalysis, and general semantics have influenced the areas of speech pathology and speech therapy.

Credit: 2 semester-hours

THE FOURTH YEAR

The course in Methods in the Teaching of Speech should be for the speech major a review of the principles learned in previous courses with a multitude of suggestions for techniques to be used in imparting that knowledge and developing those skills in the students whom he will teach. With this overview there should emerge a clear picture of the place of speech skills in the educational pattern and a philosophy which will give depth to teaching throughout one's professional career.

SPEECH 417. *Methods in the Teaching of Speech*

In this course a study is made of the objectives of speech education at each grade level; of the approaches, problems, materials, textbooks, and techniques in specific speech areas; of modern trends in instruction; and of the integration of speech with other academic departments of study.

Credit: 3 semester-hours

SPEECH 456. *Play Direction*

This course covers the choosing and casting, as well as directing, of plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. Whenever possible, this play is given publicly before a student audience. This course complements Speech 435.

Credit: 2 semester-hours

Electives

SPEECH 448. *Choral Speaking*

As members of a speaking choir, students acquire skill in interpreting various forms of literature suitable for group treatment. Consideration is given to their use in the various grade levels in teaching. Students prepare a group of selections suitable for their particular interest and purpose.

Credit: 2 semester-hours

SPEECH 449. *Public Speaking*

This is an advanced course in the theory and practice of public speaking. It provides opportunity for training in the more complex speech skills, especially in the techniques of leadership in speech situations.

Prerequisite: SPEECH 204 or the equivalent

Credit: 2 semester-hours

SPEECH 454. *Training the Speaking Voice*

This is a course in the study of the problems of speech, the development of a pleasant speaking voice with precision in diction, and the application of speech skills to practical speaking situations.

Credit: 2 semester-hours

SPEECH 462. *Group Discussion and Leadership*

Students are taught the principles of democratic discussion and methods for guiding the informal group conference, panel symposium, lecture, and debate forums. Frequent opportunities to apply these principles and methods are given through discussion of topics chosen by the class.

Credit: 2 semester-hours

SPEECH 463. *Audio-Visual Aids in Teaching Speech*

The aim of this course is to equip prospective teachers to understand the desirable characteristics; capabilities; and all possible uses of charts, models, projection equipment, and magnetic and disc recorders available for the teaching of speech. The distribution, cost, operation, servicing, and storing of instruments and of supplies are also considered.

Credit: 2 semester-hours

SPEECH 465. *Speech Arts Activity*

Credit is given for some supervised speech-arts activity, such as: playing a major role in a major production; directing a three-act play or its equivalent; giving a public play reading or lecture recital; directing a series of assembly programs; or directing and producing a series of radio programs.

Credit: 1 semester-hour

SPEECH 466. *Speech Development: Improvement and Reeducation*

This course is intended for superintendents, principals, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found on the kindergarten, elementary, and secondary-school levels; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of setting up and integrating speech education in school systems.

Demonstrations with individuals and groups are made, and students are expected to prepare a practical project.

Credit: 2 semester-hours

SPEECH 467. *Oral Interpretation for the Teacher*

This course is organized as a laboratory to help the teacher develop his potentialities in oral reading. Each student is given many opportunities to read aloud and to participate in informal critiques. Assistance is given in compiling a repertory of selections most useful in daily teaching.

Credit: 2 semester-hours

SPEECH 468. *Measurement of Hearing*

A comprehensive study of the measurement of hearing is made in this course with attention being given to the educational implications of impaired audition and deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism are considered as well as hearing tests, principles and techniques of screening tests, interpretation of test results, types and uses of hearing aids, and educational procedures for the habilitation of the hard-of-hearing or deaf child. Demonstrations and supervised practice in administering pure-tone audiometer tests are provided.

Credit: 3 semester hours

THE DEPARTMENT OF FINE ARTS

The first class with a major in fine arts was graduated in June, 1958. Students who complete the fine arts curriculum are certified to teach in the elementary schools, junior high schools, and senior high schools of New Jersey.

During the first two years the students explore design in a variety of media and the art forms of painting, ceramics, textiles, theater, and puppetry.

In the third year the students study art and civilization, the foundations of art education, and the arts of commerce and industry.

The work of the fourth year includes the making of prints and a study of the art curriculum of the elementary and secondary schools.

Sculpture, metalwork, home design and community planning, drafting and woodwork, costume design, and life drawing are offered as electives. Drawing is required throughout the four years.

FINE ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
Sci. 100A/ <i>Survey of Physical Sci.</i> or	4	Mus. 100 <i>Music Appreciation</i>	2
Sci. 100B <i>Survey of Biological Science</i>		Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
F.A. 101A <i>DESIGN IN MATERIALS, I</i>	3	F.A. 101B <i>DESIGN IN MATERIALS, II</i>	3
F.A. 102A <i>CERAMICS: POTTERY AND SCULPTURE, I</i>	3	F.A. 102B <i>CERAMICS: POTTERY AND SCULPTURE, II</i>	3
F.A. 405A <i>DRAWING, I</i>	0	F.A. 405B <i>DRAWING, II</i>	0

16½

16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Sci. 100C <i>The Earth Sciences</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
F.A. 200A THEATER ARTS, I	2	F.A. 200B THEATER ARTS, II	2
F.A. 201A TEXTILES, I	2	F.A. 201B TEXTILES, II	2
F.A. 202A PAINTING, I	3	F.A. 202B PAINTING, II	3
F.A. 405C DRAWING, III	0	F.A. 405D DRAWING, IV	0
	15½		15½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus) ..	3
Electives	4	Eng. 100G <i>Western World Literature</i>	3
F.A. 300A ART & CIVILIZATION, I..	3	Math. 400 <i>Statistics</i>	2
F.A. 301A ART IN COMMERCE & INDUSTRY, I	2	F.A. 300B ART & CIVILIZATION, II.	3
F.A. 302 FOUNDATIONS OF ART EDUCATION	2	F.A. 301B ART IN COMMERCE & INDUSTRY, II	2
F.A. 405E DRAWING, V	0	F.A. 405F DRAWING, VI	0
	16		16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 4.. Education Elective	3
Lang. 300 <i>Foundations of Language</i>	2	Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5
Electives	6	Elective—Mathematics or Science ..	2
F.A. 401 ART CURRICULUM OF ELEMENTARY & SECONDARY SCHOOLS..	2	Elective—Humanities	2
F.A. 403A PRINT MAKING, I	2	Elective	2
F.A. 405G DRAWING, VII	1	F.A. 403B PRINT MAKING, II	2
	16		16

Total: 128 semester-hours

FRESHMAN YEAR

General Education Course

FINE ARTS 100. *Introduction to the Visual Arts*

For a description of this course see page 49.

Credit: 3 semester-hours

Fine Arts Major Courses

FINE ARTS 101A and 101B. *Design in Materials*

This course is an initial exploration of the elements of design and their organization into art forms. The relationship of materials, tools, and processes in terms of the function of each art form is learned through personal exploration in a wide variety of media. The integral nature of the arts and the culture is given major emphasis throughout the course. The reading content is based upon a study of contemporary art forms.

Credit: 3 semester-hours each

FINE ARTS 102A and 102B. *Ceramics: Pottery and Sculpture*

This course in ceramics includes the making of pottery and ceramic sculpture by coil, slab, throwing, and casting as well as primitive techniques. All methods of decorating are explored including slip, agraftito, underglaze, and glaze. The making of glazes and experiments in glaze formulas are carried out. Stacking and firing the kiln are a part of each student's experience.

The course content includes a study of the world's great ceramic periods through reading and museum trips. A study is made of the relationship between children's art expression in clay and their expression in graphic media.

Credit: 3 semester-hours each

**FINE ARTS 405A, 405B, 405C, 405D, 405E, 405F, and 405G
*Drawing I, II, III, IV, V, VI, VII***

This course is given under the guidance of members of the art faculty during the four-year undergraduate program. Regular assignments and critiques are designed to develop visual perception and its organization into pictorial form. Media include pencil, charcoal, sanguine, conte, lithograph, crayon, ink, wash, scratch board, pastels, and mixed media.

A portfolio of drawings is submitted at the end of the first semester of the senior year, and the grade for all parts of the course is given at that time.

Credit: 1 semester-hour

Fine Arts Elective Course for Home Economics Major**FINE ARTS 110. *Introduction to Design in Materials***

The elements of design and their organization into art forms such as ceramics, textiles, furniture, and other articles of home use are covered in this course. The relationship of materials, tools, and processes in terms of the function of each art form is learned through studio experiences. The reading content is based upon a study of the work of contemporary designers in the field of home furnishings.

Credit: 2 semester-hours

SOPHOMORE YEAR**FINE ARTS 200A & 200B. *Theater Arts***

A major goal of this course is the development of techniques of group planning for the solution of an art problem and the awareness of individual responsibility for group achievement. Experiences are in the production of puppet and marionette shows and the preparation of scenery and lighting for live productions. Study in these areas and in the allied fields of dance, filming and television is made through reading, trips, and interviews.

Credit: 2 semester-hours each

FINE ARTS 201A & 201B. *Textiles*

This course includes the designing and making of woven and decorated textiles for use. Textiles are woven on simple handmade looms, and on professional floor and table looms. Textiles are decorated by tie-dye, block print, batik, stencil, painting, silk screen, and needlework. Costume designing emphasizes the suitability of line, color, and fabric to the individual and the occasion. Historic as well as contemporary fabrics and costume are studied through reading, visits to museums, shops, and galleries.

Credit: 2 semester-hours each

FINE ARTS 202A & 202B. *Painting*

This course includes experiences in many media and forms of painting. The student is encouraged to experiment with emphasis on personal vision and modes of expression. The use of design is directed to the formulation of a competent individual statement in a limited number of media. The development of painting, beginning with the impressionist movement and including contemporary directions, constitutes the major reading content of the course. A comparative study is made of the painting of primitive peoples, children, and contemporary artists. Frequent visits to galleries and museums are required.

Credit: 3 semester-hours each

JUNIOR YEAR**FINE ARTS 300A & 300B. *Art and Civilization***

A study is made of historic periods in which art most clearly reflects the culture. The impact on art of geographic conditions and social, economic, and religious forces is studied. Present art forms are understood by a study of their historic roots. The course serves to integrate the student's historic art information and to develop his critical and evaluative abilities. Museum visits and extensive reading are required.

Credit: 3 semester-hours each

FINE ARTS 301A & 301B. *Art in Commerce and Industry*

Lettering, layout, display, and exhibition techniques are developed in the workshop. College activities when possible supply the content of the technical problems. The relationship of hand art to machine art is considered, and the role of the artist-industrial designer in a technological age is studied to discover his contribution to a culturally healthy environment. Readings include philosophic writings of Morris, Mumford, and others and current national and foreign periodicals of industrial design. Trips to laboratories and studios are taken.

Credit: 2 semester-hours each

FINE ARTS 302. *Foundations of Art Education*

The content of this course includes a study of research findings of the pattern of child development in plastic and graphic media; the organization and presentation of art experience to the children of grades one through twelve; and the relationship of art to other areas of the curriculum; and the arts in the extra-curricular program within the school and the community. Practical aspects of teaching art including materials; tools and their source, cost, care, and organization are experienced through classroom participation.

Credit: 2 semester-hours

SENIOR YEAR**FINE ARTS 401. *Art Curriculum of Elementary and Secondary Schools***

This course is planned to give the student an opportunity to organize his learnings into a tentative curriculum of art and to test his thinking in relation to the best curriculum guides in current use.

Credit: 2 semester-hours

FINE ARTS 403A & 403B. *Print Making, I and II*

The many ways of making prints: etching, dry point, wood cuts and wood engraving, lithography, silk screen, photograms, and photography are learned in personal production which emphasizes the relation of material, tool, and process. Adaptation of these professional media to classroom use is one aspect of this course. The work of masters in these various types of print making are studied in reproductions and in museum trips.

Credit: 2 semester-hours each

ELECTIVES**FINE ARTS 400. *Philosophy of Art***

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education.

Credit: 2 semester-hours

FINE ARTS 406. *Art Workshop*

The workshop is designed to allow the student to have a concentrated experience in an art form of his choice. Each student projects his own problem in consultation with, and under the direction of, a faculty member. In addition, the student is expected to set up an exhibit of the work he has accomplished during his four years.

Credit: 4 semester-hours

FINE ARTS 408. *Creative Painting*

This course gives the student an opportunity to use the materials of the painter for personal creative experience. Through the use of oils, water colors, and other media, the student is encouraged to work on landscape, figure, and free imaginative composition. Emphasis is placed on individuality of expression, variety of subject matter, and experimentation. No previous art experience is necessary.

Credit: 2 semester-hours

FINE ARTS 414. *History of Chinese Art*

In this course the developments and distinguishing characteristics of the major arts of China are traced by specialists and are surveyed from the point of view of their historical developments. A historical survey of the development of Chinese art from the dawn of civilization to the present day is made which includes the role played by foreign influences such as the spreading of Buddhism and the Chinese influence on other parts of the world. There are twenty-four hours of lectures in the morning and round-table discussion and library work in the afternoon. During the afternoon workshop period the technique of Chinese painting is demonstrated. Although there is no prerequisite for this course, it is suggested that those who enroll should have some knowledge of art or have taken SOCIAL STUDIES 499, *Introduction to Chinese Culture*.

Credit: 3 semester-hours

FINE ARTS 415. *Designing in Native Materials*

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangement for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes becomes an exciting adventure.

Credit: 2 semester-hours

FINE ARTS 416. *Appreciation of Chinese Art*

This is an introductory course on Chinese art in its various aspects: its historical development; aesthetic principles; and various forms such as calligraphy, painting, sculpture, bronze and jade, pottery and porcelain, architecture, etc. Topics include the philosophical basis of Chinese art, nature in Chinese art, symbolism in Chinese art. Each lecture is illustrated by photographs and lantern slides as well as demonstrations. Students have an opportunity to learn the elements of Chinese painting from widely recognized Chinese artists.

Credit: 3 semester-hours

FINE ARTS 420. *Sculpture I: General*

This course provides the student with studio experiences in three dimensional expression. A variety of materials are explored including clay, plaster, metal, plastics, stone, and wood. Sculptural methods such as modeling, direct carving, construction, and casting are experienced. Special emphasis is placed on those materials and methods most applicable to the public school teaching program. In addition to the studio problems the student is required to complete text assignments and outside reading problems, make frequent museum and gallery visits, prepare written and oral reports on readings and visits, and spend additional time in designing.

Credit: 2 semester-hours

FINE ARTS 425. *Metalwork I: General*

This course introduces the student to the metals traditionally used in the shaping of useful articles and to the influence of both materials and construction on methods of design. It treats the relationships of structural and surface design as well as the techniques for developing both. It explores the role of the handicraftsman in a technological society, the relationships of hand and machine arts, and the influence of the handicrafts on the development of taste. Research in these areas includes trips, reading, and discussion.

Credit: 2 semester-hours

FINE ARTS 430. *Drafting and Woodwork*

This course is designed as an introduction to the basic processes in designing in wood with the use of hand and power tools. Drafting the designed pieces is integrated with the total designing process and includes the use of drawing instruments and the making of working drawings.

Credit: 2 semester-hours

FINE ARTS 435. *Costume Design*

A study of the elements of art as they determine the designing of the costume is the content of this course. Draping and construction in materials are the design approaches used to show the necessity of designing the costume in terms of the individual.

Credit: 2 semester-hours

FINE ARTS 440. *Home Design and Community Planning*

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science, and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishing, model homes, well-planned communities are included in the course activities.

Credit: 2 semester-hours

FINE ARTS 445. *Life Drawing*

This is a course in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

Credit: 2 semester-hours

FINE ARTS 450. *Print Making I — Silk Screen Printing*

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master designs through the construction of necessary printing facilities and printing. Experiences include the use of tusche, glue, stencil lacquer, and photographic techniques.

Credit: 2 semester-hours

FINE ARTS 460. *Photography: A Contemporary Art Form*

The content of the course is predominantly creative, using the technical materials as a medium of expression and experimentation. The work of leading contemporary artists using photography as an art medium is studied.

Credit: 2 semester-hours

FINE ARTS 474A and 474B. *Arts and Crafts in Education, I and II*

Included in this course are workshop activities in the arts and crafts of the elementary and secondary school program. Painting, drawing, modeling, pottery, weaving, papier-mache, paper sculpture, school display techniques and lettering, wood, leather, plastics, metal work, and puppetry are materials and processes which are explored.

Credit: 2 semester-hours each

THE DEPARTMENT OF FOREIGN LANGUAGES

The Foreign Language Department aims to train teachers for the junior and senior high schools in sound scholarship, true culture, and sympathetic understanding of the foreign people whose language they are to teach. The Department is also offering courses preparing students for the teaching of foreign languages in the elementary school.

All the courses in the Department of Foreign Languages are planned to provide linguistic skill, literary appreciation, and understanding of human relationships in order to insure efficient professional service. The emphasis is on sequential development which has the effect of unifying the work within the Foreign Language Department and of correlating it with English, social studies, education, art, and music.

Students majoring in a foreign language are required to take work in that language for the four years of the college course. In these four years the prospective teacher of French, Spanish, or Latin acquires a fundamental knowledge of his major subject and an understanding of world problems.

For majors in a chosen language the following courses are required: 101, 102, 201, 202, 301, 302, 401, 402, and 404.

For minors in a foreign language the following courses are recommended: 101, 102, 201, 202, and 402.

Prerequisite for those majoring or minoring in any foreign language are three or four years of high school work in the language. Consideration will be given to excellent students who have not fully met this requirement. High school Latin is desirable for all language work, but it is not prerequisite for the study of a modern language at the College. The class work in French, German, and Spanish is conducted entirely in these languages.

The Foreign Language Department sponsors three language clubs. In these extracurricular activities prospective language teachers have ample opportunity for leadership, creative work, and worthy employment of leisure time.

The College High School plays an important part in the daily life of students of the Foreign Language Department. During the freshman and sophomore years regular observation of the high school classes in the language of their major is required. A change from observation to active participation through limited assistantship and occasional demonstration is made during the junior and senior years. Thus, the subject-matter of high school and college language classes is thoroughly integrated.

An attractive feature of the foreign language work preparatory to high-school teaching is the possibility of a year of study in a foreign country, a feature which this College stresses in its training of teachers of modern languages.

Students desiring academic credit for STUDY ABROAD register for the work before taking it. All such matters as the country and institution in which the work is to be done, the amount of credit to be received, reports to be made, and the like, are prearranged with the head of the department. For further information about this work, see page 33.

In the last twenty-eight years, one hundred and forty-six students from the College have spent a year of study in colleges and universities of Austria, France, Germany, Canada, Mexico, Spain, Switzerland, and South America.

In appreciation of the professional help granted to Montclair students by foreign countries students from abroad interested in the teaching of English in the schools of their home countries have been invited as guests for a year of study at Montclair State College. In the past students from Austria, Germany, France, Cuba, Mexico, and Spain have taken work at the College.

It is impossible to estimate to its full extent the importance of this student exchange movement in the field of education. It may prove to be one of the most vital steps in the advancement of modern foreign language teaching in American high schools of today and tomorrow.

BEGINNING LANGUAGES**FRENCH 100A and 100B. *Beginning French***

This course is designed for students who desire to start French in college. Special emphasis is placed on training the student to understand, speak, read, and write the foreign language. The foreign tongue is used almost exclusively in teaching the course. Materials used introduce the student to French life and civilization. Laboratory work is included as part of the requirement for the course.

Credit: 3 semester-hours each

RUSSIAN 100A and 100B. *Beginning Russian*

Designed for those with no previous knowledge of Russian, this course stresses a thorough exposition of oral and written Russian. The reading of selected texts and conversation practice are included. Laboratory work is included as part of the requirements for the course.

Credit: 3 semester-hours each

RUSSIAN 200A and 200B. *Intermediate Russian*

This course is a continuation of RUSSIAN 100A and 100B, and is open to those who have successfully completed RUSSIAN 100A and 100B or the equivalent. After a detailed grammatical review the main emphasis falls on translations from Russian literary classics of the nineteenth and twentieth centuries and on conversational practice. This course meets three hours weekly for two semesters.

Credit: 3 semester-hours each

SPANISH 100A and 100B. *Beginning Spanish*

This course is designed for students who desire to start Spanish in College. Special emphasis is placed on the training of the student to understand, speak, read, and write the foreign language. Spanish is used almost exclusively in the teaching of the course. Students are introduced to Spanish life and civilization through the materials used in the course. Laboratory work is included as part of the requirements for the course.

Credit: 3 semester-hours each

FRENCH

The following courses are arranged to give the prospective high school teacher of French an understanding of the French people, their culture, and their problems through a study of the development of their civilization—their social, economic, political, literary, and artistic life. All courses are given entirely in French, and are designed to give ever-increasing opportunities to develop self-expression in the foreign tongue through readings, discussions, and reports.

FRENCH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A/ <i>Survey of Physical Sci. or Sci. 100B Survey of Biological Science</i>	4	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
FR. 101 <i>FRENCH CIVILIZATION: CONTEMPORARY FRANCE</i>	4	FR. 102 <i>FRENCH CIVILIZATION: ORIGINS TO 1610</i>	4
			15½
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
FR. 201 <i>SEVENTEENTH CENTURY PROSE AND POETRY</i>	4	FR. 202 <i>CORNEILLE, MOLIÈRE, RACINE</i>	4
			16½
	16½		

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
FR. 301 <i>FRENCH CIVILIZATION: EIGHTEENTH CENTURY</i>	4	FR. 302 <i>DEVELOPMENT OF THE FRENCH NOVEL TO 1870</i>	4
			16
	16		

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science..	2	Ed. 4.. <i>Education Elective</i>	3
Electives	4	Elective—Humanities	2
LANG. 401 <i>TEACHING OF MODERN LANGUAGES IN SECONDARY SCHOOL</i>	3	FR. 404 <i>SURVEY OF FRENCH POETRY</i> ..	2
FR. 402 <i>FRENCH GRAMMAR FOR TEACHERS</i>	4		15
	16		

Total: 128 semester-hours

THE FIRST YEAR

French Civilization

FRENCH 101. *French Civilization: Contemporary France*

This course aims to give the students an understanding of France today through a study of the various aspects of her material, intellectual, artistic,

and spiritual life. The topic of each section is introduced by a short factual essay in French with the double purpose of providing a study of vocabulary and acquiring information on the subject-matter. The course is taught in French and is conducted by means of reading, questions, and class discussion. Weekly written compositions based on the study of the week are required. Oral reports are given before the class by the students on a topic of their choice taken from the subject-matter of the course.

Credit: 4 semester-hours

FRENCH 102. *French Civilization: Origins to 1610*

After having studied the various aspects of France today, this course is designed to acquaint the student with the background from which contemporary France has emerged. A study is made of French history from its origin and of the cultural development of France—social, intellectual, artistic, and spiritual—through the Middle Ages and the Renaissance.

Credit: 4 semester-hours

THE SECOND YEAR

Seventeenth Century French Literature

FRENCH 201. *Seventeenth Century French Prose and Poetry*

In the sophomore year the student is introduced to the literature and life of the seventeenth century, an age of important French contributions to the world's literature. Special attention is given to great prose writers: La Rochefoucauld, Pascal, Mme. de Sevigne, Bossuet, Mme. de LaFayette, La Bruyere, and La Fontaine. The colorful reigns of Louis XIII and Louis XIV furnish the historical background of this century.

Credit: 4 semester-hours

FRENCH 202. *Corneille, Molière, Racine*

In this course one of the works of each of these three authors is studied closely in class and analyzed to appreciate its contribution to the development of the classical theater. Students report orally and in writing on the other main plays and make a careful study of the characters.

Credit: 4 semester-hours

THE THIRD YEAR

FRENCH 301. *French Civilization: Eighteenth Century*

This course aims to train students in all the phases of the literature of eighteenth century France. An attempt is made to evaluate French thought and to present a picture of French civilization as expressed in architecture, painting, sculpture, furniture, and music. This course constitutes an advanced language study based on *explication de textes* of representative authors, both prose writers and dramatists.

Credit: 4 semester-hours

FRENCH 302. *Development of the French Novel to 1870*

This course traces the development of the French novel from 1678 to 1870. Works characteristic of each period of development are read and analyzed for their background revealing life in France, their delineation of character, and their literary value and influence. The student is expected to read extensively and critically and to report on his findings.

Credit: 4 semester-hours

THE FOURTH YEAR**Theory and Practice in the Teaching of French**

The courses in French during the senior year are designed to combine all the professionalization of previous French courses with a careful study of the teaching of French in the secondary schools. The period of practice teaching allows the prospective teacher to test his scholarly preparation under the guidance of a successful high-school teacher.

FRENCH 401. *The Teaching of French in Secondary Schools*

For a description of this course, see LANGUAGE 401, page 114.

Credit: 3 semester-hours

FRENCH 402. *French Grammar for Teachers*

The aim of this course is essentially professional. It provides a complete grammatical review with a wealth of collateral information on specific difficult points with demonstrations of teaching procedures. This course is closely integrated with LANGUAGE 401.

Credit: 4 semester-hours

FRENCH 404. *Survey of French Poetry*

This course presents a picture of the development of French poetry as an expression of different literary movements. Authors representative of each period are studied, with special emphasis placed on the nineteenth and twentieth centuries. The course is conducted in French and provides opportunity for the improvement of clearness of enunciation and pronunciation as well as for personal enrichment through an appreciation of French poetry.

Credit: 2 semester-hours

ELECTIVES**FRENCH 405. *Great Currents of Contemporary French Literature***

This survey of contemporary French literature is based on the study and interpretation of French civilization and literature in the pre-war, war, and post-war generations. The threefold aim of the course is: (1) to help the student to understand and to appreciate the new trends of thought in France through literary interpretation; (2) to enable him to plan his reading intelligently by selecting from the abundant materials that contemporary literature offers to his choice; and (3) to give him a background for a more thorough study of this period of French literature. The course includes lectures, class and individual readings, and discussions.

Credit: 3 semester-hours

FRENCH 415. *The French Club and Other Extra-curricular Activities*

This course, designed particularly for teachers of French, surveys briefly the aims of extra-curricular activities in modern language work and emphasizes especially: (1) the organization of extra-curricular activities, (2) the preparation of materials, and (3) the procedures. The course is conducted in French on the model of a forum with general discussion. The actual conduct of an extra-curricular activity is required as a laboratory exercise.

Credit: 2 semester-hours

FRENCH 420. *French Culture for the Elementary School*

This course provides foreign language teachers on the elementary-school level with a rich background for the teaching of French in grades one through six. It includes a review of French human geography including the provinces, customs, food, songs, and dances; French history through a study of the great men and women of France; and French holidays and holy days. This course is conducted entirely in French, and the materials are presented with a view toward enabling teachers to present various aspects of French culture to elementary school pupils.

Credit: 3 semester-hours

LATIN

The courses in Latin are designed to continue the work begun in the language in high school. Further development of the ability to read and to comprehend the language and literature, and a deepening of the understanding and appreciation of the historical-cultural prominence of Rome and her contribution to Western civilization are basic objectives. Emphasis is placed upon the evolution of the language as it developed from the Greek to the Romance, upon the language of ideas as they are expressed in the literary masters, and upon the social, political, and economic institutions which have influenced the Western world.

LATIN MAJOR**FRESHMAN YEAR**

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A/ <i>Survey of Physical Sci. or Sci. 100B Survey of Biological Science</i>	4	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
LAT. 101 <i>THE MASTERS OF PROSE LITERATURE</i>	4	LAT. 102 <i>THE MASTERS OF POETIC LITERATURE</i>	4
			<hr/>
			15½
	<hr/>		
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
LAT. 201 ROMAN LETTER WRITING AND BIOGRAPHY	4	LAT. 202 ROMAN HISTORY	4
			16½
	16½		

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
LAT. 301 ROMAN DRAMA	4	LAT. 302 ROMAN SATIRE	4
			16
	16		

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science ..	2	Ed. 4.. <i>Education Elective</i>	3
Electives	4	Elective—Humanities	2
LAT. 401 TEACHING OF LATIN IN SECONDARY SCHOOLS	3	LAT. 404 MEDIEVAL LATIN	2
LAT. 402 LATIN GRAMMAR FOR TEACHERS	4		15
	16		
Total: 128 semester-hours			

THE FIRST YEAR

The Golden Age of Latin Literature

LATIN 101. *The Masters of Prose Literature*LATIN 102. *The Masters of Poetic Literature*

These courses enable the student to sample the writings of the major figures in Rome's richest period. The variety of subject-matter, the diversity of interests, the importance of style in expressing ideas are noted in studying the authors, as well as an analysis of the age to determine causes for greatness.

Credit: 4 semester-hours each

THE SECOND YEAR

The Silver Age of Latin Literature

LATIN 201. *Roman Letter Writing and Biography*LATIN 202. *Roman History*

The nature of the writings of the authors read from the Silver Age permits a more intimate view of the daily life of the Romans, completing the

student's concept of a typical Roman, the public figure of the Late Republic and the private citizen of the Silver Age, as well as illustrating contrast in lofty and familiar language and style.

Credit: 4 semester-hours each

THE THIRD YEAR

Roman Drama and Philosophy

LATIN 301. *Roman Drama*

LATIN 302. *Roman Satire*

The Roman dramatists are presented not because of the merit of the plays but because of their value in the development of drama as a literary type. Particularly notable are the borrowings from the plays by the pre-Shakespearean dramatists, Shakespeare, and the Romance dramatists. The language in Plautus serves to illustrate early forms and the language in its developmental process. The satire is a mirror reflecting the life of the period, indicating forces at work which are undermining Rome's great record and reputation, forces which eventually spell her decline.

Credit: 4 semester-hours each

ELECTIVES

LATIN 303. *Lucretius*

This course includes the reading of *De Rerum Natura* with study and discussion of the relation of science and philosophy in antiquity with special emphasis upon Greek schools of thought and Roman interpretation of Hellenistic ideas. Attention is given to the antecedents of Modern Science with special attention upon the physical scientists including Democritus, the Greek atomic scientist who influenced Lucretius. This study is made with a view to developing a better understanding of the modern scientific age.

Credit: 2 semester-hours

LATIN 304. *Latin Literature for the High School*

This course includes a rapid rereading of the authors traditionally read in high school classes—Caesar, Cicero, and Vergil. A compilation of an anthology of selections from Latin literature which would be suitable for use to implement high school texts and which might serve as supplementary reading in an accelerated program is undertaken as a class project.

Credit: 2 semester-hours

THE FOURTH YEAR

Theory and Practice in the Teaching of Latin

The senior courses in Latin are designed to provide an outlet for the cumulative experience of the Latin student with great minds and great achievements of a great world power through teaching the language in a secondary school

after materials and methods have been carefully collected and studied. The period of student teaching allows the prospective teacher to test his preparation under the guidance of a highly successful high-school teacher.

LATIN 401. *Methods of Teaching Latin in Secondary Schools*

This course includes a consideration of the aims and objectives of Latin teaching with emphasis upon the role of Latin in the high school curriculum and the integration of Latin with other high school subjects. A study of methods of teaching Latin is made in historical perspective. Teaching materials in the field are surveyed and collected. Other units developed in the course include audio-visual material, realia, preparation of and participation in classroom assignments and lessons in the demonstration high school, test construction and grading, and planning projects and club programs.

Credit: 3 semester-hours

LATIN 402. *Latin Grammar for Teachers*

The aim of this course is to develop a comprehensive view of Latin grammar, to give practice in the writing of Latin according to the styles of Caesar and Cicero, to study those styles as evidenced in the best-known works, and to set up standards of criticism of both prose and poetical writing. These objectives stress materials useful in high-school teaching.

Credit: 4 semester-hours

LATIN 404. *Medieval Latin*

The special emphasis in this course is on the transition of the language from Classical to Romance. The attention centers on literature of church and state for the purpose of studying the evolution of modern western ideas.

Credit: 2 semester-hours

ELECTIVE

LATIN 405. *The Elegy*

This course includes the reading of the Roman elegaic poets, Tibullus and Propertius, together with a study of the elegy as a form of poetic expression. Comparisons are made of the elegy in Latin and English literature.

Credit: 2 semester-hours

SPANISH

Following the trend of the times, the work in Spanish while maintaining the classic approach is now placing considerable emphasis on Hispanic-American civilization. To a great extent our national policy of Western hemisphere comity and the immediate economic importance of Central and South America underlie the present keen interest of high-school students in the study of Spanish. The courses are given in Spanish and are designed to give the prospective teacher of Spanish ample opportunities for self-development in the foreign tongue through readings, discussions, and reports.

SPANISH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A/ <i>Survey of Physical Sci. or</i>	4	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
Sci. 100B <i>Survey of Biological Science</i>		Sci. 100C <i>The Earth Sciences</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	SPAN. 102 <i>CIVILIZATION OF SPAIN, II</i>	4
SPAN. 101 <i>CIVILIZATION OF SPAIN, I</i>	4		15½
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
SPAN. 201 <i>HISTORY & LITERATURE OF THE PERIOD OF CONQUEST AND COLONIZATION OF HISPANIC AMERICA</i>	4	SPAN. 202 <i>LITERATURE AND HISTORY OF THE PERIOD OF INDEPENDENCE OF HISPANIC AMERICA</i>	4
	16½		16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
SPAN. 301 <i>THE PROSE OF THE GOLDEN AGE</i>	4	SPAN. 302 <i>THE DRAMA OF THE GOLDEN AGE</i>	4
	16		16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science..	2	Ed. 4. <i>Education Elective</i>	3
Electives	4	Electives—Humanities	2
LANG. 401 <i>TEACHING OF MODERN LANGUAGES IN SECONDARY SCHOOLS</i>	3	SPAN. 404 <i>SURVEY OF SPANISH POETRY</i>	2
SPAN. 402 <i>SPANISH GRAMMAR FOR TEACHERS</i>	4		15
	16		

Total: 128 semester-hours

THE FIRST YEAR

Spanish Civilization

SPANISH 101 and 102. *Civilization of Spain*

This course centers on the appreciation and understanding of Spain through a study of the land and the people and the culture and the customs.

Each region is taken up in turn for its different aspects. Novels, short stories, and plays of representative authors are read and discussed in class. The acquisition of factual knowledge is important, but fluency in speaking Spanish is the primary objective of this first year.

Credit: 4 semester-hours each

THE SECOND YEAR

Hispanic-American Civilization

SPANISH 201. *History and Literature of the Period of Conquest and Colonization of Hispanic-America*

SPANISH 202. *Literature and History of the Period of Independence of Hispanic-America*

The work in Spanish during the second year is devoted entirely to the acquisition of knowledge about the current culture patterns of Hispanic-America. Each period is taken up in turn, and the social, political, and artistic aspects of life are treated through reading the works of outstanding authors, individual reports, and class discussions.

Credit: 4 semester-hours each

THE THIRD YEAR

The Spanish Classics

SPANISH 301. *The Prose of the Golden Age*

This course is designed to give an understanding and appreciation of the literary works of Miguel de Cervantes, *Don Quixote de la Mancha*, *Entremeses*, *Novelas Ejemplares*, emphasizing their ethical and artistic values.

Credit: 4 semester-hours

SPANISH 302. *The Drama of the Golden Age*

The most representative plays of Lope de Vega, Tirso de Molina, Calderón de la Barca, and Ruiz de Alarcón are read and analyzed for their sources, style, versification, and the character descriptions are examined against a comprehensive study of the historical background of the sixteenth and seventeenth centuries.

Credit: 4 semester-hours

THE FOURTH YEAR

Theory and Practice in the Teaching of Spanish

The courses in Spanish during this year are designed to combine all the professionalization of previous Spanish courses with a careful study of the teaching of Spanish in secondary schools. The period of practice teaching allows the prospective teacher to test his scholarly preparation under the guidance of a successful high-school teacher.

SPANISH 401. *The Teaching of Spanish in Secondary Schools*

For a description of this course, see LANGUAGE 401, page 114.

Credit: 3 semester-hours

SPANISH 402. *Spanish Grammar for Teachers*

The aim of this course is essentially professional. It provides a complete grammatical review with a wealth of collateral information on specific difficult points with demonstrations of teaching procedures. This course is closely integrated with LANGUAGE 401.

Credit: 4 semester-hours

SPANISH 404. *Survey of Spanish Poetry*

This course aims to present the different movements in Spanish poetry with emphasis on the Romantic movement.

Credit: 2 semester-hours

ELECTIVES**SPANISH 405. *Great Currents of the Contemporary Spanish Novel***

This course aims to give a more complete appreciation and to test the student's growth in understanding those questions about contemporary Spain which were raised in the first year of Spanish. It traces the literary trends in the novel of recent years. Particular attention is devoted to the "1898 generation."

Credit: 3 semester-hours

SPANISH 415. *Projects in Spanish and Latin-American Folklore*

This course, designed particularly for teachers and students of Spanish, surveys briefly the aims of extra-curricular activities in the field of Spanish teaching and emphasizes especially: (1) the organization of extra-curricular activities, (2) practical instruction in the preparation of materials, songs, dances, costumes, and (3) artistic presentation of the results of the course in a carefully supervised program given on the college campus.

Credit: 2 semester-hours

SPANISH 420. *Spanish Culture for the Elementary School*

This course provides foreign language teachers on the elementary-school level with a rich background for the teaching of Spanish in grades one through six. It includes a review of Spanish human geography including the provinces, customs, food, songs, and dances; Spanish history through a study of the great men and women of Spain; and Spanish holidays and holy days. This course is conducted entirely in Spanish, and the materials are presented with a view toward enabling teachers to present various aspects of Spanish culture to elementary school pupils.

Credit: 3 semester-hours

LANGUAGE

Background Course

The students of all college departments are expected to broaden and intensify their command of English by taking the following course arranged by the Language Department for the junior year. It aims to arouse their intellectual curiosity in the origin, development, and range of language in general, and of English in particular, so that, henceforth, they will be more word-conscious and their teaching will benefit by an extended and more sensitive use of their mother tongue.

THE THIRD YEAR

LANGUAGE 300. *Foundations of Language*

For a description of this course, see page 48.

Credit: 2 semester-hours

THE FOURTH YEAR

Professional Courses

Seniors in the Department of Foreign Languages are expected to gain a critical insight into modern methods of foreign-language teaching. An analysis of actual practice motivates the systematic survey of this field of special interest with a theoretical selection of aims and procedures in preparation for the teaching of foreign languages in high schools.

LANGUAGE 401. *The Teaching of Modern Languages in Secondary Schools*

The work of this course is focused on such topics as the following: values of foreign language teaching; ultimate and immediate aims in foreign language teaching; survey of the outstanding methods, pronunciation, oral work, reading, grammar, reviews, realia, examinations, tests, supervised study, etc. The course consists of readings and discussions, lesson planning and demonstrations, and organization of materials for use in student-teaching.

Credit: 3 semester-hours

LANGUAGE 402. *Phonetics*

This course aims to give special training in the analysis of speech production from the physiological and acoustical standpoints and in detecting, analyzing, and correcting errors in pronunciation of foreign languages. Students planning to teach French or Spanish are instructed in the use of the accepted symbols of the International Phonetic Association. Modern textbooks in foreign languages are examined for their treatment of pronunciation. This course consists of the making of phonetic charts, work in the phonetic laboratory, continued drill in transcribing passages from foreign languages into pho-

netic symbols. This course is open to juniors and seniors, majoring or minoring in Spanish or French.

Credit: 2 semester-hours

LANGUAGE 412. *Foundations of Language, Advanced Course*

This course continues the study of linguistics in general and of our own Indo-European group in particular. It focuses especially upon the origin, history, and development of Latin, French, German, Spanish, and English phonology, morphology, and vocabulary. Through lectures and collateral reading the student is acquainted with the latest research findings in linguistics. Maps and charts are required for the graphic presentation of each unit of work, and an individual report on some phase of this field is presented to the class by every student.

Credit: 2 semester-hours

LANGUAGE 420. *The Teaching of Foreign Languages in the Elementary School*

This course includes an exploration of the reasons for teaching foreign languages in the elementary schools and a study of appropriate grade levels for beginning foreign languages. Current literature on this subject is used to provide study materials and bases for reports by students. Attention is given to the study and evaluation of the many syllabi and guides now available for the teaching of French and Spanish in the elementary school. As an outcome of this course a syllabus covering grades one through six is produced by the class.

Credit: 3 semester-hours

GERMAN

GERMAN 101. *German Civilization: Development of German Civilization from The Earliest Times to The Decline of Chivalry*

GERMAN 102. *German Civilization: From The Rise of The Cities to The Present Time*

After a survey of the main problems of contemporary Germany, a better understanding of German civilization may be obtained by study of the following units of work: activities of the German people in relation to their natural environment; Germanic life as revealed by old Teutonic fragments; the migrations, conversion to Christianity, and old Christian documents; national and court epics at the time of Chivalry; Minnegesang; Meistersang; the cities, the Renaissance, and the Reformation; literary consequences from the Thirty Years' War; the development of the Volkslied; and the time of regeneration in life and literature.

Credit: 4 semester-hours each

GERMAN 201. *The German Classics: Lessing, Schiller, and Goethe*

This course deals with the life and works of Lessing, Schiller, and Goethe. Their important works are read and analyzed, and their sources and influences are studied. However, special emphasis is given to the intensive reading of Lessing's *Nathan der Weise* and *Minna von Barnhelm*, Schiller's *Wallenstein* and *Wilhelm Tell*, and Goethe's *Iphigenie* and *Faust* — including study of their sources, structure, style, versification, character description.

Credit: 4 semester-hours

GERMAN 202. *The Nineteenth Century*

The chief trends in the German life of the nineteenth century are surveyed from the political, social, and economic viewpoint. Against this background the romantic, realistic, naturalistic, and neo-romantic writers and their works are studied together with their outstanding contributions in prose, poetry, philosophy, and drama.

Credit: 4 semester-hours

THE DEPARTMENT OF HOME ECONOMICS

The Department of Home Economics at the Montclair State College has a twofold purpose: (1) to improve individual and family living and (2) to prepare for a career in teaching home economics in elementary and secondary schools.

Graduates with this major receive a Smith-Hughes certificate enabling them to teach in either a general or vocational home economics program in New Jersey. They also are prepared to teach any or all of the areas generally accepted as comprising home economics; i.e., foods and nutrition, clothing and textiles, family finance, home management and equipment, family relations, and child development.

Although the Department of Home Economics offers no minor, it invites and welcomes students from other departments to elect courses in home economics.

The Home Economics Department has planned experiences for majors to supplement classroom work. They are as follows:

1. *Summer Clothing Practicum*

After having completed Home Economics 102, *Introduction to Clothing Selection and Construction*, two garments are to be constructed during the summer months. The instructor assists each student in planning and evaluating this experience. These garments are submitted for evaluation during the first week of the fall semester of the sophomore year.

2. *Summer Work Practicum*

Students are to supplement course work with actual work experience. This consists of a least 300 hours of summer employment, with or

without pay, in a carefully selected area to meet the individual student's educational needs. Usually this can be accomplished by eight weeks of employment. Preferably this work practicum should be done during the summer preceding the senior year. Students should sign up with the Department Chairman during the spring semester, and this experience is evaluated during the first two weeks of the fall semester of the senior year.

3. *Faculty Teas*

Each student is responsible for planning, organizing, and supervising the serving of at least one faculty tea. Preferably this experience should occur during the junior and senior years.

4. *Observations in the College High School*

Sophomore students are required to observe during the spring semester in the College High School. Junior and senior students observe and participate in the College High School through demonstrations, arrangement of bulletin boards, and laboratory supervision. This experience will correlate with class work in HOME ECONOMICS 401A and 401B.

Students majoring in home economics are not permitted to hold off-campus jobs that interfere with the normal activities of teaching during junior or senior practicum. Residence in the home-management house requires participation in activities that generally prevent part-time employment off campus.

HOME ECONOMICS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts.</i>	3	Mus. 100 <i>Music Appreciation</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
CHEM. 103 <i>CHEMISTRY FOR HOME ECONOMICS</i>	3	CHEM. 104 <i>CHEMISTRY FOR HOME ECONOMICS</i>	3
H. Ec. 101 <i>INTRO. TO HOME ECONOMICS</i>	2	H. Ec. 102 <i>INTRO. TO CLOTHING SELECTION AND CONSTRUCTION</i>	3
			16½
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Elective	2	BIOL. 210 <i>ELEMENTARY BACTERIOLOGY</i>	4
BIOL. 209 <i>HUMAN BIOLOGY</i>	3	H. Ec. 202 <i>MEAL PLANNING</i>	3
H. Ec. 201 <i>INTRO. TO FOODS & NUTRITION</i>	3	H. Ec. 204 <i>ADVANCED CLOTHING SELECTION AND CONSTRUCTION</i>	3
H. Ec. 203 <i>TEXTILES</i>	2		
			16½
	16½		

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum (4 weeks off campus)</i>	3
Electives	4	Eng. 100G <i>Western World Literature</i>	3
H. Ec. 301 <i>THE CHILD IN THE FAMILY</i>	3	H. Ec. 302 <i>FAMILY RELATIONS</i>	3
H. Ec. 303 <i>HOUSING & HOME FURNISHINGS</i>	3	H. Ec. 304 <i>HOME MANAGEMENT & HOUSEHOLD EQUIPMENT</i>	2
H. Ec. 401A <i>HOME ECONOMICS EDUCATION, I (Junior Methods)</i>	0	H. Ec. 305 <i>FAMILY FINANCE</i>	2
	15		16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 4.. <i>Education Elective</i>	3
Math. 400 <i>Statistics</i>	2	Ed. 403B <i>Student Teaching (6 weeks off campus)</i>	5
Electives	4	Elective—Humanities	2
H. Ec. 401B <i>HOME ECONOMICS EDUCATION, II (Seminar Included — Senior Methods)</i>	3	Elective	2
H. Ec. 403 <i>HOME MANAGEMENT HOUSE RESIDENCE</i>	3	H. Ec. 402 <i>NUTRITION EDUCATION & GROUP FEEDING</i>	2
	15	H. Ec. 404 <i>VOCATIONAL EDUCATION</i> ..	2
			16

Total: 128 semester-hours

FRESHMAN YEAR

HOME ECONOMICS 101. *Introduction to Home Economics*

This is an orientation course designed to introduce the home economics freshman to general college life. An opportunity is provided for the students to meet with some of the college faculty and to become aware of the many college facilities. A study is made of the history, scope, and professional requirements and opportunities in the field of home economics. Visits are made to elementary, junior, and senior high school home economics programs.

Credit: 2 semester-hours

HOME ECONOMICS 102. *Introduction to Clothing Selection and Construction*

This course is an introduction to the study of the important position of clothing, considering sociological, psychological, and economic aspects. Clothing planning, selecting, and buying are studied. The choice and use of color, design, and fabric in relation to individual clothing needs are emphasized and applied in the construction of simple garments.

Credit: 3 semester-hours

RELATED SCIENCE

CHEMISTRY 103 and 104. *Chemistry for Home Economics*

This course provides an opportunity for students of home economics to become acquainted with the major principles of chemistry and their application in the field of home economics. The work of the first semester deals

with topics selected from the field of inorganic chemistry. The work of the second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to home economics. The course consists of class discussions, reference work, laboratory and field trips which attempt to show the importance of the contributions of chemistry to the field of home economics.

Credit: 3 semester-hours each

SOPHOMORE YEAR

HOME ECONOMICS 201. *Introduction to Foods and Nutrition*

The essentials of an adequate diet; the functions of various food nutrients and their requirements by different individuals; selection and preparation of foods for the family, emphasizing the basic principles and processes, are the principal topics of this course. Some problems treated in this course relate to the preparation of vegetables, meats, breads, cakes, and pastry. Standard techniques of food preparation are stressed.

Credit: 3 semester-hours

HOME ECONOMICS 202. *Meal Planning*

Planning, marketing, preparing, and serving nutritionally adequate and attractive meals for families of varying incomes are subjects covered in this course. Consideration is given to typical family meal problems. Emphasis is on management of time, energy, and equipment.

Credit: 3 semester-hours

HOME ECONOMICS 203. *Textiles*

This course provides a study of the factors that influence durability, use, and price of household and clothing fabrics. Recognition and analysis of fibers, fabrics, and finishes, centered around problems in the selection and buying of textiles for clothing and household purposes are included in the course. Consumer education in the field of textiles and textile economics is stressed.

Prerequisites: CHEMISTRY 103 and 104

Credit: 2 semester-hours

HOME ECONOMICS 204. *Advanced Clothing Selection and Construction*

Advanced construction principles with an intensive study of the practical methods of solving fitting problems are treated in this course. Application is made of the principles of costume design in clothing selection of ready-to-wear clothing as well as in the construction of advanced clothing projects.

Prerequisite: HOME ECONOMICS 203

Credit: 3 semester-hours

RELATED SCIENCE**BIOLOGY 209. *Human Biology***

This course is designed for home economics majors. Bodily structure, functioning of parts, how that functioning affects human behavior are all considered. Primary emphasis is placed upon physiology rather than morphology and upon the maintenance of good health of the individual and of the community.

Credit: 3 semester-hours

BIOLOGY 210. *Elementary Bacteriology*

Since the course is designed for the home economics student, it is concerned primarily with these bacteria and fungi associated with food and nutrition, sanitation, hygiene, industry, and disease. Identification of the organisms, their economic importance, and their control are emphasized.

Credit: 4 semester-hours

JUNIOR YEAR**HOME ECONOMICS 301. *The Child in the Family***

The purpose of this course is to develop an understanding of the role of the family in meeting the basic needs of children and in guiding their development. Opportunities are provided for supervised observation and participation with groups of pre-school children.

Credit: 3 semester-hours

HOME ECONOMICS 302. *Family Relations*

Topics of this course include emphasis on preparation for marriage and problems of human behavior within homes: emotional development, personality, environmental, and background factors in relation to marriage adjustment, and family relations of the individual throughout the family-life cycle.

Credit: 3 semester-hours

HOME ECONOMICS 303. *Housing and Home Furnishings*

Housing needs of the family today and the factors that affect them; family differences, costs, space organization, housing control and legislation, and construction materials used are discussed. Furnishings for the home—furniture, rugs, draperies, etc. — and how to select, buy, and arrange them in different kinds of homes are topics of study.

Credit: 3 semester-hours

HOME ECONOMICS 304. *Home Management and Household Equipment*

Equipment that is used in the home and how to use it effectively; principles of time and energy management; storage; materials used in household equip-

ment; how equipment is constructed for durability, suitability, and ease in cleaning are important topics of this course. Opportunities are provided to evaluate various kinds of equipment including sauce pans, egg beaters, toasters, washing machines, irons, vacuum cleaners, etc.

Credit: 2 semester-hours

HOME ECONOMICS 305. *Family Finance*

Money management, budgeting, saving, use of credit, insurance, annuities, investments, taxation and disposing of property are the principal topics of this course. The effect of outside economic conditions on family financial planning is studied.

Credit: 2 semester-hours

HOME ECONOMICS 401A. *Home Economics Education, I* (Junior Methods)

This course is designed to help the prospective teacher in the assembling and presentation of subject-matter. Topics included are: planning, unit and lesson plan construction, the use of audio-visual materials, choice and use of materials of instruction, and teaching techniques.

Credit: 0 semester-hours

ELECTIVE

HOME ECONOMICS 310. *Experimental Foods*

This is a comparative approach to cookery methods with emphasis on the newer techniques. It is slanted to the needs of the prospective teacher. Each student does experimental laboratory work on selected phases of cookery.

Credit: 3 semester-hours

SENIOR YEAR

HOME ECONOMICS 401B. *Home Economics Education, II* (Senior Methods)

Planning courses of study, illustrative material, evaluating teaching techniques, planning space and equipment needs, administrative problems, home economics clubs, vocational home-making programs, adult classes, and the place of the home economics teacher in the total school program are the topics of this course.

Credit: 3 semester-hours

HOME ECONOMICS 402. *Nutrition Education and Group Feeding*

This course includes a study of adequate menu planning for large groups, use of standardized recipes, quantity buying and preparation of foods, and problems involved in school-lunch management.

Prerequisite: HOME ECONOMICS 202

Credit: 2 semester-hours

HOME ECONOMICS 403. *Home Management House Residence

This course includes residence in the home management house integrating the understanding, knowledge, and skill gained from various phases of home economics. Principles of time, energy, and money management are put into practice. Planning and preparing meals, doing the laundry, cleaning and caring for the house, and planning and carrying through a variety of entertainments are examples of home-making activities experienced by the student.

Credit: 3 semester-hours

HOME ECONOMICS 404. *Vocational Education*

(This course is submitted to fulfill the requirements for the New Jersey state plan for certification of home economics teachers which reads: "A course in Principles of Vocational Education must be taken for vocational certification.")

This course presents a history of the development, organization, and purposes of vocational programs and implications for future growth. A study is made of the characteristics of the vocational homemaking program which set it apart from the non-vocational homemaking program. The role of the U.S. Office of Education, Vocational Division, in the interest of home economics is defined.

Credit: 2 semester-hours

ELECTIVES**HOME ECONOMICS 405. *Advanced Child Development***

This course includes observation and participation in the activities of a nursery school. It is based on actual experience in the program such as: observation and helping with daily routine, preparation of food, directing play activities, musical activities, story telling, and similar activities.

Prerequisite: HOME ECONOMICS 301, *The Child in the Family*

Credit: 2 semester-hours

HOME ECONOMICS 406. *Tailoring*

This course is designed for home economics majors. Fundamental processes and procedures for constructing tailored garments are included. The differences between dressmaking and tailoring techniques are emphasized, and a comparison is made between factory-made garments and custom tailoring.

Prerequisite: HOME ECONOMICS 204

Credit: 2 semester-hours

* Married students with family responsibilities are not required to reside in the home management house. They are, however, expected to take part in many of the activities of the home management house and to carry out additional projects in their own homes. They receive credit for Home Economics 403A—Home Management.

THE DEPARTMENT OF INDUSTRIAL ARTS

The Industrial Arts Department emphasizes the relation of the cultural aspects of arts to the development of civilization and the vital part that industry plays in the life of each of us today. Creative satisfactions resulting from well-designed and carefully executed projects are provided for in the experience the student finds in this area.

The industrial arts program of the College offers opportunities for the student to broaden his concepts of the industrial world in which he lives. This is achieved through experiences in the graphic arts and drawing, woods and crafts, and metals and powers areas. It is presupposed that the student enrolling in the industrial arts program has had preliminary training. In addition to increasing the above knowledges and skills, the student is directed in the techniques of teaching industrial arts in the elementary, junior, and senior high schools.

Students applying for admission to the industrial arts program are encouraged to gain industrial experiences through actual contact with industrial firms. Students who complete this curriculum are prepared to teach industrial arts in the elementary schools, junior high schools, and the senior high schools of New Jersey.

INDUSTRIAL ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Music 100 <i>Music Appreciation</i>	2	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Sci. 100A/ <i>Survey of Physical Sci.</i>	4
Sci. 100C <i>The Earth Sciences</i>	2	or Sci. 100B <i>Survey of Biological Science</i>	
I.A. 100 <i>INTRO. TO INDUSTRIAL ARTS</i>	2	Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
I.A. 101A <i>GRAPHIC ARTS & DRAWING, I</i>	4	I.A. 101B <i>GRAPHIC ARTS & DRAWING, II</i>	4
	<hr/> 16½		<hr/> 16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i>	2	Math. 300 <i>Social Uses of Mathematics</i>	2
I.A. 201A <i>WOOD AND CRAFTS, I</i>	4	I.A. 201B <i>WOOD AND CRAFTS, II</i> ...	4
I.A. 202A <i>METALS AND POWER, I</i> ...	4	I.A. 202B <i>METALS AND POWER, II</i> ..	4
	<hr/> 16½		<hr/> 16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Electives	4	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus) ..	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100G <i>Western World Literature</i>	3
I.A. 300A <i>PRINCIPLES OF INDUSTRIAL ARTS</i>	2	I.A. 300B <i>CURRICULUM & TEACHING OF I.A.</i>	2
I.A. 302 <i>GRAPHIC ARTS & DRAWING, III</i>	4	I.A. 301A <i>WOOD AND CRAFTS, III</i> ..	4
	16		15

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 4.. <i>Education Elective</i>	3
Lang. 300 <i>Foundations of Language</i> ..	2	Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5
Math. 400 <i>Statistics</i>	2	Elective—Mathematics or Science ..	2
Electives	4	Elective—Humanities	2
I.A. 403 <i>METALS AND POWER, III</i> ..	4	Electives	4
	15		16

Total: 128 semester-hours

FRESHMAN YEAR

INDUSTRIAL ARTS 100. *Introduction to Industrial Arts*

This is an orientation course introducing the student to the nature and content of the industrial arts program, the laboratory technique for individuals and groups, techniques of study, organizational problems in the laboratory, and the professional aspects in a career as an industrial arts teacher.

Credit: 2 semester-hours

INDUSTRIAL ARTS 101A. *Graphic Arts and Drawing, I*

This course is intended to be quite general in scope and is organized as an introductory shop course. The graphic arts area includes an introduction to printing, study of basic technical information, composition, proof reading, distribution, press work, paper cutting, padding. The drawing area includes an introduction to drawing instrument selection, sketching, blackboard illustration, basic design, single and multiview projections, lettering, sections and conventions, dimensions, and notes.

Credit: 4 semester-hours

INDUSTRIAL ARTS 101B. *Graphic Arts and Drawing, II*

The second experience in the area of graphic arts and drawing affords the student opportunity for further exploration and study. The area of graphic arts includes principles of layout and design, ink, paper, linoleum block arts, wood arts, composition, and presswork. Drawing embodies the development of surfaces and intersections, revolutions, pictorial representation, perspectives, pictorial sketching, illustrations, and axonometric drawing.

Credit: 4 semester-hours

SOPHOMORE YEAR**INDUSTRIAL ARTS 201A. *Wood and Crafts, I***

This is an introductory course in hand woodwork and simple crafts where skills, techniques, and procedures are acquired through actual participation in activities involving materials, tools, and procedures. Emphases in the area of wood are on lumber, hardware, glue jointry, tool operations, equipment, layout, and design. Areas in crafts include carving, plastics, candle making, keene cement, and the more common crafts.

Credit: 4 semester-hours

INDUSTRIAL ARTS 201B. *Wood and Crafts, II*

Advanced experience in wood and crafts provides for further development of basic skills and techniques that lead to further exploration and experimentation. The area of wood incorporates the hand tool processes, the preparation of wood for finishing, the study and use of stains, fillers, shellac, lacquer, varnishes, paints and solvents, compound finishes, French polish, and refinishing. Craft areas include copper foil, jewelry, tin craft, lapidary, etching, basketry, and chair caning.

Credit: 4 semester-hours

INDUSTRIAL ARTS 202A. *Metals and Power, I*

This course presents an introduction to the area of metal and power where basic fundamentals, procedures, and techniques are studied. The area of metal includes the design and development of projects in sheetmetal, art metal, spinning, and plating. Power incorporates the study of atomic structure, static electricity, circuits, power theory, wire sizes and resistance, temperature, coefficients, magnetism, electromotive forces, and meters and measurements.

Credit: 4 semester-hours

INDUSTRIAL ARTS 202B. *Metals and Power, II*

The second experience in metal and power enlarges on previously developed skills and techniques through further exploration and experimentation. The area of metal provides opportunity for wrought iron work, bench metal work, forging, annealing, and heat treating. Power includes the study of electrical development and transmission, AC-DC theory, motors and generators, household mechanical and appliance repairs, communications, radio, and television.

Credit: 4 semester-hours

JUNIOR YEAR**INDUSTRIAL ARTS 300A. *Principles, Methods, and Curriculum in Industrial Arts, I***

The development and expansion of industrial arts over the years points up many principles that exemplify its present philosophy. To understand these

principles the industrial arts program in the modern school is approached through a study of the purposes of general education, industrial arts as general education, basic concepts of democracy, education as a meeting of needs, relationship of industrial arts to general education, industrial arts objectives, terminology, basic conclusion of program of industrial arts organization and shop management, and evaluation of programs.

Credit: 2 semester-hours

INDUSTRIAL ARTS 300B. *Principles, Methods, and Curriculum in Industrial Arts, II*

An overview of accepted industrial arts curriculum and teaching practices which are in use in public schools constitutes the major area of this course. The various types of problems investigated include organization of the general shop, records, finance, distribution of supplies and equipment, operational responsibilities, safety, related information and guidance, industrial arts and public relations, testing and recording progress, industrial arts laboratory planning, industrial arts equipment selection, the teacher and his profession.

Credit: 2 semester-hours

INDUSTRIAL ARTS 301A. *Wood and Crafts, III*

The third experience in wood and crafts provides an opportunity for the student, who by now has acquired an adequate wood and crafts background, to undertake more advanced work. The wood area entails the study of safety, maintenance, and operation of all common woodworking machines, along with various types of project design and development. The crafts emphasize the importance of ceramics. The area includes the study of clay; making ceramic pieces by the pinch, coil, slab, throw, or cast method; glazing; and firing.

Credit: 4 semester-hours

INDUSTRIAL ARTS 302. *Graphic Arts and Drawing, III*

The third experience in graphic arts and drawing provides opportunity for exploring the more advanced areas in these fields. The graphic arts area includes photography, bookbinding, duplicating, rubber stamp, dry point etching, and silkscreening. The emphasis in drawing is placed upon schematic drawings, advanced design, working drawings, detailed drawings, architectural drawings, exploded view drawings, assembly drawings, and reproduction of drawings.

Credit: 4 semester-hours

SENIOR YEAR

INDUSTRIAL ARTS 403. *Metals and Power, III*

The third experience in metal and power gives advanced work in these areas. The metal area includes activities in brazing, foundry, machine shop, low pressure welding, and mass production techniques. The power area in-

volves experiences in auto mechanics, power mowers, outboard motors, diesels and other combustion engines, mechanical power, steam power, and hydraulics.

Credit: 4 semester-hours

ELECTIVES

INDUSTRIAL ARTS 401. *Comprehensive General Shop for Elementary and Junior High Schools*

Laboratory experiences are organized according to the principles and philosophy of a general shop at the kindergarten, elementary, and junior high school levels. Each student has the opportunity to plan a laboratory program entailing as many of the areas as needed to produce the type of program found at these levels in the public schools of New Jersey. All students are encouraged to gain experience at the kindergarten, elementary, and junior high school levels as consultants working with the classroom teachers of these levels. Students are encouraged to develop class units, group projects, and individual projects which are related to the lives of boys and girls in these grade classifications.

Credit: 4 semester-hours

INDUSTRIAL ARTS 402. *Comprehensive General Shop for Senior High School*

In this course laboratory experiences are organized under the principles and philosophy of a general shop at the high-school level. Students are encouraged to develop class units, group projects, and instructional materials, and to perfect or develop new technical skills appropriate for the high-school level.

Credit: 4 semester-hours

INDUSTRIAL ARTS 442. *Conservation of Basic Industrial Materials*

In this course the students live for ten days at the New Jersey State School of Conservation, Stokes State Forest. Study is devoted to the origin, development, use, and consumption of the basic industrial materials as they exist in their natural state. The materials studied include wood, plastics, leather, ores, petroleum, textiles, and steel. The course material is developed through the use of (1) field trips to the natural sources of supply and basic industries, (2) films concerning the materials and their use in industry, and (3) discussion periods with the specialists of industry and government officials who are responsible for conserving and using these materials.

NOTE: The fee for this course is \$60.00 which includes tuition, board, lodging, transportation on field trips, and use of recreational facilities.

Credit: 2 semester-hours

INDUSTRIAL ARTS 443. *The Use and Processing of Basic Industrial Materials by Modern Industry*

In this course the students live for ten days at the New Jersey State School of Conservation, Stokes State Forest. Study is devoted to the recognition, use,

and processing of the basic industrial materials as done by industrial concerns. The materials studied evolve around the use of ores, wood, fuels, and agricultural products as they are transformed or processed by industry in the making of additional semi-finished raw materials such as plastics, leather, pewter, textiles, ceramics, steel, and metal products. The course material is developed through the use of (1) field trips to the industries, (2) films and visual aids concerning the transformation of the basic materials by industry, and (3) discussion periods with specialists of the industry, government officials, and educators.

Credit: 2 semester-hours

THE DEPARTMENT OF MATHEMATICS

Prospective teachers of secondary-school mathematics are selected with much care on the basis of personal interviews, written examinations, previous scholastic record, and recommendations from their respective high schools. Students thus selected can achieve a broad cultural background, a thorough understanding of their chosen field of work, and a good working knowledge of the problems, techniques, and methods of procedure in the teaching of mathematics in the modern secondary school.

Scholarship in mathematics can result only from continued study of mathematics; it cannot result from a mere review of high-school courses. Hence, the course of study in mathematics provides for a study of topics in college mathematics with continual emphasis on their use as a background for teaching. Courses have been selected to the end that the students become proficient in various fields of mathematics.

Mathematics for a student in teacher education differs little in actual content from that for a student in a liberal arts program. Since the student is preparing to teach mathematics to secondary-school pupils, he must not only have a mastery of the topics he is to teach, but must also see them as an integral part of the subject-matter of mathematics in the entire program of mathematics in the elementary and secondary school program. He must know the place of mathematics in the history of civilization and its practical uses; he must not only understand the uses and limitations of formulas, but must also be able to derive them from simpler ideas. He must not only understand fundamental principles, but must also acquire the facility of making them clear to others and of searching out the obstacles that hinder another's understanding. Thus, in a teacher-education curriculum the student acquires not only a mastery of the content but an understanding of its professional significance in the teaching process.

The courses offered by the Department of Mathematics are taught with the following objectives in view:

1. To give the student a review of and practice in those topics in mathematics which he will be required to teach. This is best done by having such

review an incidental part of the advanced work in mathematics rather than a repetition of high-school subject-matter.

2. To professionalize the course so that the student will be conscious of teaching problems and will have abundant practice in logical reasoning and in making lucid explanations.

3. To note that many phases of college mathematics are simply the extension or continuation of similar topics in high-school mathematics.

4. To give the student that self-confidence which is the concomitant of a broad knowledge of subject-matter beyond minimum requirements.

5. To supply a cultural background and an awareness of the specific contributions which mathematics has made to civilization.

6. To make the student aware, through observation and participation in teaching in the College High School, of the character and diversity of the problems arising in teaching mathematics to secondary-school pupils.

7. To integrate the work with other courses, particularly science, social studies, and economics, so that the student will realize the effectiveness of mathematics as a tool in solving scientific and sociological problems.

No student should attempt to major in mathematics who has not demonstrated his ability by his high-school work in elementary and intermediate algebra and in plane geometry. The student who has also taken trigonometry and advanced algebra will be better prepared for work in the College.

Students who major in mathematics should consult with the Chairman of the Mathematics Department before selecting a field of minor interest.

MATHEMATICS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Dev. of World Civ., I</i>	3	Soc. St. 100B <i>Dev. of World Civ., II</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of</i>	
Sci. 100A/ <i>Survey of Physical Science</i> or Sci. 100B <i>Survey of Biological Science</i>	4	<i>Speech</i>	3
Mus. 100 <i>Music Appreciation</i>	2	Ed. 100 <i>Mental Hygiene and Personal Adjustment</i>	2
MATH. 101 <i>MATHEMATICAL ANALYSIS, I</i>	4	F.A. 100 <i>Intro. to the Visual Arts</i>	3
		MATH. 102 <i>MATHEMATICAL ANALYSIS, II</i>	4
	$16\frac{1}{2}$		$15\frac{1}{2}$

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 200A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Cont. American Life, I</i>	3	Soc. St. 200B <i>Cont. American Life, II</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Development and Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
Electives	4	Electives	4
MATH. 201 <i>CALCULUS, I</i>	4	MATH. 202 <i>CALCULUS, II</i>	4
	$16\frac{1}{2}$		$16\frac{1}{2}$

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Principles and Techniques of Secondary Education</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Eng. 100G <i>Western World Literature</i>	3
Electives	4	Electives	4
MATH. 408 INTRO. TO MATHEMATICAL STATISTICS	3	MATH. 308 THE TEACHING OF JUNIOR HIGH SCHOOL MATHEMATICS	2
MATH. 302 HIGHER ALGEBRA	4	MATH. 301 MODERN COLLEGE GEOMETRY	4
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Math. or Science	2	Ed. 4.. <i>Education Elective</i>	3
Elective—Humanities	2	Elective	2
Elective	3	MATH. 404 MODERN MATHEMATICAL LITERATURE	2
MATH. 401 THE TEACHING OF MATH. IN SECONDARY SCHOOLS	3		15
MATH. 402 APPLICATIONS OF MATHEMATICS	3		
	16		

Total: 128 semester-hours

MATHEMATICS 304 is required of students who have not had solid geometry in high school and is recommended as an elective for others.

Students who anticipate selecting mathematics as a field of minor interest should consult with the Chairman of the Mathematics Department before beginning such work. The following courses are recommended for all mathematics minors: MATHEMATICS 101, 102, 201, and 202. If solid geometry has not been studied in high school, MATHEMATICS 304 should also be taken.

All students in the College, except mathematics and science majors, are required to take MATHEMATICS 300 and 400. Mathematics majors take MATHEMATICS 308 and 408 instead of MATHEMATICS 300 and 400.

THE FIRST YEAR

The mathematics of the first year is organized in one large unit of work. The traditional subjects of college algebra, trigonometry, and analytical geometry are not treated as separate and distinct subjects, resulting in artificial lines of demarcation in the mind of the student, but are interwoven, with some of the more elementary portions of calculus, into an integrated course in mathematical analysis. The central idea of the organization is the function concept. The locus concept serves as a secondary theme about which processes, inverse to those previously introduced, are organized.

Elementary mathematical analysis forms an essential part of the preparation for teaching high-school mathematics. Due attention is given to the professionalization of subject-matter by continued application of knowledge previously gained, by creating a desire for further investigation, by repeated application of the scientific method of thinking, by having the student make careful analyses and explanations, and by showing how certain phases of the

work may be transferred to high-school situations. As an integral part of the students' training, this first year of mathematics serves three purposes: it forms a foundation for further work in mathematics; it forms a background course for the investigation of other sciences; and it gives knowledge and training, which can be used in the teaching of high-school mathematics.

Each student is required to make twenty observations in the College High School. Reports for these observations are required.

MATHEMATICS 101. *Mathematical Analysis I*

The principal topics are: Functions and graphs, linear functions, quadratic functions, polynominal functions, rational and irrational functions, rates of change, differentiation and integration of simple functions, logarithms and logarithmic functions, the theory and use of the slide rule, permutations, combinations and probability, sequences and series. This semester's work is closely correlated with and forms a review and extension of senior high-school mathematics.

Credit: 4 semester-hours

MATHEMATICS 102. *Mathematical Analysis II*

The chief topics considered are: trigonometric and circular functions, trigonometric formulas, the solution of triangles, inverse circular functions, natural logarithms, exponential and hyperbolic functions, simultaneous equations and determinants, the straight line, loci, the conic sections, polar coordinates, transformation of coordinates and the general second-degree equation in two variables, parametric equations, empirical equations, and an introduction to the analytic geometry of space.

Credit: 4 semester-hours

MATHEMATICS COURSE FOR SCIENCE MAJORS

MATHEMATICS 103. *Mathematics for Science Majors, I*

The principal topics are: Graphs and functions; functions of first and second degree; rational fractions; direct, inverse, and joint variations; scientific notation; logarithms; slide rule and mathematical tables; exponential functions. This semester's work is closely allied with, and forms a review and extension of senior high-school mathematics.

Credit: 3 semester-hours

MATHEMATICS 104. *Mathematics for Science Majors, II*

The principal topics are: Trigonometric functions; elements of analytic geometry; elements of differential and integral calculus; arithmetic and geometric series with application; frequency distribution; measures of central tendency and variability; probability sampling and reliability; regression and correlation.

Credit: 3 semester-hours

THE SECOND YEAR

A study of differential and integral calculus is made the second year. The entire year's work forms a unit sequential to that taken the first year. Professionalization is effected, as in the first year, by emphasis on participation in class discussions by the students with emphasis on clear and concise explanations. Students are required to report on thirty observations in the College High School.

MATHEMATICS 201. *Calculus, I*

A clear understanding of the meaning and uses of the derivative, as well as mechanical facility in the computation of the derivative of algebraic and transcendental functions, are the main objectives of this course. Applications of the derivative are studied in determining the form and properties of curves in solving problems in maxima and minima, in finding roots of equations, in parametric and polar equations, in curvature and the radius and circle of curvature. Other topics are differentials, the theorem of mean value, and its applications.

Credit: 4 semester-hours

MATHEMATICS 202. *Calculus, II*

The use of integration as a process of summation is applied to elementary problems in finding areas enclosed by plane curves, volumes of solids of revolution, the length of a curve, and areas of surfaces of revolution in both rectangular and polar coordinates. Mechanical facility in integration is promoted by a study of the use of various devices in integration and by instruction in the use of tables of integrals. Other topics studied are centroids, fluid pressure, work, and series.

Credit: 4 semester-hours

MATHEMATICS ELECTIVE COURSE FOR INDUSTRIAL ARTS MAJORS**MATHEMATICS 210. *Mathematics for Industrial Arts***

The aim of this course is to provide industrial arts students with an understanding of the mathematics needed in solving mensuration problems and such problems as may arise in a machine shop, woodworking, automobile mechanics, or the study of electricity. Topics include common and decimal fractions, exponents, equations, the use of vernier measuring devices, the use of formulas, slide rules, mathematical tables, logarithms, the solution of linear and quadratic equations, the use of simple relations in plane and solid geometry, and elementary trigonometry.

Credit: 2 semester-hours

THE THIRD YEAR

In the first semester a course in Higher Algebra is required. This course provides the student with similar preparation and confidence for the teaching of algebra in the high school.

Modern College Geometry is required in the second semester. In this course the student learns more powerful methods and techniques for solving original exercises in geometry and gains experience in the construction of geometric proofs by analysis.

Professionalization during this year is emphasized by increased demands on the student in making lucid explanations, and in ability to anticipate difficulties in teaching procedures. He now begins to participate actively in the classes in the College High School as an assistant and is expected to help in diagnosing pupil difficulties and in providing remedial practice. At least forty observations are required as a part of MATHEMATICS 308.

MATHEMATICS 300. *The Social Uses of Mathematics*

For a description of this course, see page 50.

Credit: 2 semester-hours

MATHEMATICS 301. *Modern College Geometry*

This course gives the student a thorough preparation for teaching plane geometry. Effective methods of attack in solving problems are carefully analyzed and applied. An intensive, well-organized review of high-school geometry emphasizes ways of developing and teaching the more difficult material. This prepares the way for faster progress with new and advanced work, including the more recent developments in plane geometry. Throughout the course special effort is made to correlate the material studied with that of the high school. Representative topics are: the fundamental framework of plane geometry, loci and geometric constructions; fundamental theorems of Ceva, Menelaus, Stewart, Euler, Ptolemy, etc.; homothetic figures, the harmonic range, noteworthy lines and points, systems of circles, and inversion.

Credit: 4 semester-hours

MATHEMATICS 302. *Higher Algebra*

Among the topics of advanced algebra studied in this course are: a systematic treatment of the foundations of algebra, the development of the number system, the properties of polynomials and methods of solving algebraic equations, the analytic criteria for the constructibility of geometric plane figures, graphs, applications of the calculus and determinants, and related problems in algebraic analysis. At every opportunity this material is correlated with the subject-matter of secondary school mathematics.

Credit: 4 semester-hours

MATHEMATICS 304. *Solid Geometry*

This course is required of those students majoring or minoring in mathematics who have not had solid geometry in high school, and is an elective for those who desire to review the subject from an advanced point of view. Besides the treatment of the usual theorems, the course emphasizes alternate methods of proof and the application of algebra, plane trigonometry, and elementary analysis to solid mensuration. Modification in teaching as suggested by recent commission reports is stressed.

Credit: 2 semester-hours

MATHEMATICS 308. *The Teaching of Junior High School Mathematics*

Most of the content of MATHEMATICS 300 is covered in this course, but its chief function is to present those techniques and methods of procedure which can be used successfully in the teaching of junior high school mathematics. At least forty observations of classes in the junior high school with reports thereon are required in this course.

Credit: 2 semester-hours

THE FOURTH YEAR

In the fourth year the course in *Applications of Mathematics* gives the future teacher an effective background in the use of precision instruments. The course in the *Teaching of Mathematics in Secondary Schools* coordinates and brings to a focus all of the professionalization of his previous courses. Here his attention is concentrated solely on a careful study of the teaching of mathematics in secondary schools. He becomes acquainted with the literature of the teaching of mathematics and with discussions by leading teachers in mathematical periodicals. In supervised student-teaching the student puts into practice, under expert direction and supervision, in high-school classes, the theories and methods he has studied. Thus, we have the combination of sound scholarship in mathematics and an apprenticeship under successful high-school teachers.

MATHEMATICS 400. *Educational Statistics*

For a description of this course, see page 51.

Credit: 2 semester-hours

MATHEMATICS 401. *The Teaching of Mathematics in Secondary Schools*

The techniques of teaching different units of work in the secondary school are studied, and the application of these techniques in a demonstration class is observed by the student. Eventually, the student participates in organizing and preparing teaching material; in conducting class activities; in constructing, administering, and evaluating tests; in tutoring; and in other teaching activities.

Credit: 3 semester-hours

MATHEMATICS 401X. *The Teaching of Mathematics in Secondary Schools*

Various methods and techniques of teaching different units of work in secondary school mathematics are studied. Out of his own experience and that of others, the student is required to formulate and discuss effective teaching procedures. Units of work are discussed as to content, organization, presentation, teaching techniques, and evaluation of achievement. Criteria for the selection and use of modern texts and auxiliary teaching materials are included.

Credit: 2 semester-hours

MATHEMATICS 402. *Applications of Mathematics*

This course deals with the use of instruments in precision measurements to supply adequate information and teaching techniques for various phases of junior and senior high school mathematics. It includes the use of the abacus, the slide rule, hypsometer, transit, sextant, planimeter, plane table and scale drawing, etc. The student is required to make some of the simpler instruments and demonstrate their use for classroom instruction.

Credit: 3 semester-hours

MATHEMATICS 404. *Readings and Lectures in Mathematics*

Lectures are given upon advanced topics in mathematics and on those phases of mathematics which are finding new applications, especially as they are related to the secondary field. Besides a mastery of this lecture material, the student is held responsible for a written report on an approved topic or on specific readings in recent mathematical literature.

Credit: 2 semester-hours

MATHEMATICS 405. *History of Mathematics*

As a study of elementary mathematics emphasis is placed on the historical growth of arithmetic, algebra, and geometry. The development of fundamental concepts and operations involving the use of symbols is studied with emphasis placed upon noteworthy contributions and the influence of leading mathematicians. A by-product is the motivating effect of historical information on the teaching and learning of mathematics.

Credit: 2 semester-hours

MATHEMATICS 406. *Solid Analytic Geometry*

A review and extension of the theory of determinants, a study of lines and planes in space, of space-coordinates, transformation of coordinates, loci in space, the sphere, and of quadric surfaces are considered in this course. The study of the general quadric equation in three variables, invariance under motion, and the classification of numerical equations completes the course.

Credit: 2 semester-hours

MATHEMATICS 407. *Advanced Calculus*

After a brief review of the fundamental concepts of elementary calculus, more advanced topics are considered which include the theory of limits, continuity, the general theorem of mean value, infinite series, partial differentiation, and multiple integrals.

Credit: 2 semester-hours

MATHEMATICS 408. *An Introduction to Mathematical Statistics*

This first course covers the usual topics in statistics, using calculus as a major tool in the derivation of formulas. Topics included are: types of data and types of measurement; attributes and variables; graphical representation; measures of central tendency and dispersion; moments; binomial, Poisson, and normal distributions; linear regression and correlation; elements of sampling theory and statistical inference. This course is required of mathematics majors in lieu of MATHEMATICS 400.

Credit: 3 semester-hours

MATHEMATICS 409. *Introduction to Contemporary Mathematics*

The aim of this course is to develop the point of view of contemporary mathematics and to consider its potential influence upon secondary school mathematics. Special consideration is given to topics in professional literature for possible inclusion in secondary school mathematics. Such topics include sets, Boolean algebra, a modern concept of variable and function, a detailed study of sentences and statements, the use of symbolism and patterns in mathematics, linear programming, and the application of new mathematical techniques in the social sciences.

Credit: 2 semester-hours

MATHEMATICS 410. *Mathematics of Finance*

This course introduces the student to the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It also discusses the mathematics of life insurance covering the following subjects: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course is designed to give a helpful background to the mathematics teacher as well as to be an aid to the student of economics and insurance.

Credit: 2 semester-hours

MATHEMATICS 412. *Modern Geometry*

This course presents a treatment of modern synthetic geometry on an advanced level. It is based on a fundamental framework of plane geometry and maturity of teaching in the field of mathematics. Topics treated are loci

and geometric constructions; fundamental theorems of Ceva, Menelaus, Stewart, Euler, Ptolemy, etc.; homothetic figures, the harmonic range, noteworthy lines and points, systems of circles, and inversion.

This course is not open for credit to students who have received credit for MATHEMATICS 301.

Credit: 4 semester-hours

MATHEMATICS 453. *Differential Calculus*

The basic concepts of differential calculus are developed for students who have previously taken at least one year each of college mathematics, college physics, and college chemistry. Among the topics covered are functional relationships, graphical representations of science problems, slope, limits, continuity, differentiation of algebraic and transcendental functions, geometric and physical applications of derivatives, velocity, and acceleration in curvilinear motion. The applications are developed utilizing the scientific background of the students. Students who have taken MATHEMATICS 201 may not take this course for credit.

Credit: 3 semester-hours

MATHEMATICS 454. *Integral Calculus*

The basic concepts of integral calculus are developed for students who have previously taken at least one year each of college mathematics, college physics, and college chemistry. Among the topics included are integration procedures, solid analytic geometry, geometrical and physical applications of the definite integral in two and three dimensional problems, infinite series, and Fourier series with applications. The applications are developed utilizing the scientific background of the students. Students who have taken MATHEMATICS 202 may not take this course for credit.

Credit: 3 semester-hours

THE DEPARTMENT OF MUSIC

The Department of Music offers a threefold program:

1. A major in music education for students who wish to teach music in grades one through twelve.
2. A minor in music education for students who wish to teach music in combination with an academic subject in grades seven through twelve.
3. Music courses as cultural background for students who intend to teach academic subjects in the secondary schools.

The Music Major

The music major prepares the student to teach vocal or instrumental music, music appreciation, and music theory in the elementary and secondary schools. The curriculum includes four areas of subject-matter; music history and appreciation, music theory, applied music, and music pedagogy. Music

majors pursue the same core curriculum throughout the freshman and sophomore years; thereafter, they choose differentiated curricula in instrumental or vocal emphasis. By use of free electives, it is possible for the instrumental student to elect vocal emphasis, or the vocal student to elect instrumental emphasis, thereby qualifying himself to teach in both areas.

Students who wish to major in music are required to have a preliminary conference with the Head of the Music Department, at which time they will discuss and demonstrate their qualifications for specialization in this field. Prospective music majors should have performance ability of promise on a primary and secondary instrument, good musicality, a knowledge of elementary music theory, and give evidence of serious music study throughout the high-school years.

Instrumental primary students are urged to participate in choral organizations in high school; voice primary students are urged to study piano throughout the four years in high school. Two years of a language are required for entrance to the music major.

MUSIC MAJOR — INSTRUMENTAL EMPHASIS

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i> ..	3	Sci. 100A/ <i>Survey of Physical Sci. or Sci. 100B Survey of Biological Science</i>	4
Sci. 100C <i>The Earth Sciences</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Mus. 102 SIGHT READING & EAR TRAINING (3)	2
Mus. 101 SIGHT READING & EAR TRAINING (3)	2	Mus. 104 PRIMARY INSTRUMENT, II	1
Mus. 103 PRIMARY INSTRUMENT, I ..	1	Mus. 105B SECONDARY INSTRUMENT, II	½
Mus. 105A SECONDARY INSTRUMENT, I	½		
	17		16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Cont. American Life</i> ..	3	Soc. St. 200B <i>Cont. American Life</i> ..	3
Ed. 201 <i>Human Dev. & Behavior</i> , I	3	Ed. 202 <i>Human Dev. & Behavior</i> , II	3
Mus. 201 HARMONY, I	3	Mus. 202 HARMONY, II	3
Mus. 203 PRIMARY INSTRUMENT, III	1	Mus. 204 PRIMARY INSTRUMENT, IV	1
Mus. 205A STRING INSTR., I (2) ..	1	Mus. 205B STRING INSTR., II (2)	1
Mus. 207 EPOCHS IN MUSICAL DEV., I	2	Mus. 208 EPOCHS IN MUSICAL DEVELOPMENT, II	2
Mus. 210A SECONDARY INSTRUMENT, III	½	Mus. 210B SECONDARY INSTRUMENT, IV	½
ENSEMBLE	1	ENSEMBLE	1
	15	Elective	2

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Lit.</i>	3
Elective Humanities (free elective —1)	2	Lang. 300 <i>Foundations of Language</i> ..	2
MUS. 303 PRIMARY INSTRUMENT, V ..	1	MUS. 304 PRIMARY INSTRUMENT, VI ..	1
MUS. 206A WOOD WIND INSTRUMENTS (2)	1	MUS. 305 ORCHESTRATION	2
MUS. 306A SCHOOL ORCHESTRAS	2	MUS. 306B SCHOOL BANDS	2
MUS. 307 FORM AND ANALYSIS	2	MUS. 308 VOICE CLASS FOR INSTRUMENTALISTS	1
ENSEMBLE	1	MUS. 309 BRASS WIND INSTRU. (2) ..	1
Elective	2	ENSEMBLE	1
			16

16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Math. 400 <i>Statistics</i>	2	Ed. 4.. <i>Education Elective</i>	3
Electives	5	Elective Mathematics or Science ..	2
MUS. 401 METHODS OF TEACHING MUSIC IN THE SECONDARY SCHOOLS ..	3	Elective	2
MUS. 402 PRIMARY INSTRUMENT, VII ..	1		15
MUS. 206B PERCUSSION INSTRU. (2) ..	1		
ENSEMBLE	1		

16

Total: 128 semester-hours

MUSIC MAJOR — VOCAL EMPHASIS

FRESHMAN YEAR

Fall Semester	S.H.	Spring Semester	S.H.
Phys. Ed. 100A <i>Phys. Ed. Activities</i> ..	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i> ..	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i> ..	3	Speech 100D <i>Fundamentals of Speech</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i> ..	3	Sci. 100A/ <i>Survey of Physical Sci. or Sci. 100B Survey of Biological Science</i> ..	4
Sci. 100C <i>The Earth Sciences</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	MUS. 102 SIGHT READING & EAR TRAINING (3)	2
MUS. 101 SIGHT READING & EAR TRAINING (3)	2	MUS. 104 PRIMARY INSTRUMENT, II ..	1
MUS. 103 PRIMARY INSTRUMENT, I	1	MUS. 105B SECONDARY INSTRUMENT, II	½
MUS. 105A SECONDARY INSTRUMENT, I	½		
	17		16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i> ..	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i> ..	½
Soc. St. 200A <i>Cont. American Life</i> ..	3	Soc. St. 200B <i>Cont. American Life</i> ..	3
Ed. 201 <i>Human Dev. & Behavior, I</i> ..	3	Ed. 202 <i>Human Development & Behavior, II</i>	3
MUS. 201 HARMONY, I	3	MUS. 202 HARMONY, II	3
MUS. 203 PRIMARY INSTRUMENT, III ..	1	MUS. 204 PRIMARY INSTRUMENT, IV ..	1
MUS. 205A STRING INSTRU., I (2) ..	1	MUS. 205B STRING INSTRU., II (2) ..	1
MUS. 207 EPOCHS IN MUSICAL DEV., I ..	2	MUS. 208 EPOCHS IN MUSICAL DEVELOPMENT, II	2
MUS. 210A SECONDARY INSTRUMENT, III	½	MUS. 210B SECONDARY INSTRUMENT, IV	½
ENSEMBLE	1	ENSEMBLE	1
	15	Elective	2
			17

JUNIOR YEAR

Ed. 304 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
MATH. 300 <i>Social Uses of Math.</i> ..	2	Eng. 100G <i>Western World Lit.</i>	3
Elective Humanities (free elective —1)	2	Lang. 300 <i>Foundations of Language</i> ..	2
MUS. 303 PRIMARY INSTRUMENT, V..	1	MUS. 304 PRIMARY INSTRUMENT, VI	1
MUS. 301 CHORAL TECHNIQUE	2	MUS. 305 ORCHESTRATION	2
MUS. 307 FORM AND ANALYSIS	2	MUS. 320 TEACHING MUSIC IN THE ELEMENTARY SCHOOL	3
MUS. 310A SECONDARY—PIANO	$\frac{1}{2}$	MUS. 310B SECONDARY—PIANO	$\frac{1}{2}$
ENSEMBLE	1	ENSEMBLE	1
Elective	3		
			15 $\frac{1}{2}$
	16 $\frac{1}{2}$		

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Math. 400 <i>Statistics</i>	2	Ed. 4.. <i>Education Elective</i>	3
Electives	4	Elective Mathematics or Science ..	2
MUS. 401 METHODS OF TEACHING MUSIC IN SECONDARY SCHOOLS ..	3	Elective	2
MUS. 429 A CAPPELLA CHOIR AND CHORAL CONDUCTING	2		15
MUS. 402 PRIMARY INSTRUMENT, VII	1		
ENSEMBLE	1		
	16		

Total: 128 semester-hours

Applied Music

Music majors will choose a primary and a secondary instrument in applied music, one of which shall be piano. Other primary instruments may be organ, voice, violin, or other band and orchestra instruments. The primary instrument represents the student's greatest talent and accomplishment; the secondary instrument, lesser talent and accomplishment. Every music major will give a graduation recital on his primary instrument in the senior year. Students receive a one-hour private lesson on the primary instrument and a half-hour private lesson (or equivalent class lesson) on the secondary instrument each week.

All music students will study with the applied music teachers provided by the College.

Entrance Requirements in Primary Instruments

1. Piano

- Play from memory all major and harmonic minor scales, four octaves, hands together and I, IV, and V chords and inversions in each key.
- A little prelude or two part invention by J. S. Bach.
- An easy sonata by Haydn, Mozart, or Beethoven, played from memory.
- A composition by a Romantic or modern composer of the student's choice.

2. Voice

- A good natural voice above the average in quality and range; good intonation and clear diction.
- Two songs of the student's choice selected from standard voice repertory, such as a simple art song, an air from an oratorio, or an aria from an opera, one of which shall be sung in English.
- A minimum of two years of piano study.
- Knowledge of French or German is recommended.

3. Violin

- a. Play from memory all major and melodic minor scales, three octaves.
- b. An etude selected from Dont. Op. 37 or Kreutzer, Number 2-20, or equivalent.
- c. A first movement selected from the following concertos: Viotti, Numbers 22, 23; DeBeriot, Number 9; or Vivaldi, A minor; or two movements from a sonata by Handel, Corelli, or Tartini.
- d. A composition chosen by the student from the classic repertory.

4. Clarinet

- a. Play from memory all major and melodic minor scales, three octaves, moderate tempo.
- b. Completion of a substantial portion of one of the standard clarinet methods: Baermann, Lazerus, Langenous, Klose, or equivalent.
- c. An etude chosen from Baermann, Bk. IV, characteristic studies, Klose, or equivalent.
- d. A composition chosen by the student from the classic repertory.

5. Trumpet or Cornet

- a. Play from memory without music, all major, and melodic minor scales, two octaves where possible.
- b. Completion of a substantial portion of Arban's Method for the Trumpet or equivalent.
- c. An etude chosen from the Twelve Characteristic Etudes, Arban.
- d. A composition chosen by the student from the classic repertory.

Entrance requirements for other primary instruments may be had upon request.

Entrance Requirements in Piano, Secondary Instrument

1. Evidence of the satisfactory completion of John Thompson's *Modern Course for the Piano, First and Second Grade Books*, or equivalent.
2. All major scales, sharps and flats, hands together, played from memory.
3. Two of the following compositions played from memory:
 - a. Minuet in G, Bach, *Classics Albums, Book I*, B.F. Wood Music Company.
 - b. Sonatina in C, Op. 36, No. 1, Clementi, first movement.
 - c. Melody, Schumann, *Classics Albums, Book I*.

This requirement represents at least one year of serious music study.

Entrance requirements for the other secondary instruments may be had upon request.

A student will be admitted with a condition in his secondary instrument provided he has compensatory performance abilities on other instruments. A condition on the secondary instrument, however, must be removed during the first year. A student will not be permitted to enter the sophomore year until the condition has been removed. Instruction on sub-credit bearing secondary instruments will be taken at the student's expense and from approved teachers.

All instruction in applied music taken during the summer session and all instruction required to make up failures in applied music will be taken at the student's expense.

Entrance Requirements for Student Teaching

Regardless of vocal or instrumental emphasis, all music majors are required to meet the following minimum performance standards with an average grade of not less than C before they enter student teaching:

1. Give evidence of a working knowledge of practical keyboard harmony; ability to harmonize and transpose a simple melody; chord with primary chords in any key.
2. Sing and play two easy folk songs of contrasting mood.
3. Play an easy selection on a string instrument; other than primary or secondary instrument.
4. Play eight community songs, three of which shall be "The Star Spangled Banner," "America," and "America the Beautiful."

Music Scholarships

1. C.O.S. Howe Memorial Organ Scholarship

In 1939, Mrs. C.O.S. Howe gave the College a three-manual Austin pipe organ, a library of organ music, and a fund for a perpetual scholarship in organ in memory of her husband, the late Dr. C.O.S. Howe.

The C.O.S. Howe Memorial Organ Scholarship is awarded annually to a qualifying student. The requirements are:

- a. At least one year's previous study on the pipe organ.
 - b. Sufficient pianistic skill, developed and maintained, to profit by specialized instruction on the pipe organ.
 - c. A knowledge of elementary music theory.
 - d. An active interest in choral music.
- #### 2. Passaic-Bergen Symphonic Society Scholarship

This scholarship in violin, viola, cello, oboe, bassoon, flute, or French horn is available to a student of Passaic or Bergen County, who has been active in a musical organization in high school.

Application for the above scholarships may be made to the Dean of Students, Montclair State College, Upper Montclair, N. J.

Ensemble

Regardless of primary instrument all music majors will participate two years in choral organizations. Thereafter, they may elect membership in other organizations. However, credit will not be given for less than two consecutive semesters in any organization. Ensemble credit is not given for the freshman year. Thereafter, a maximum of five semester-hours may be so earned. Students may not participate in three organizations either with or without credit without securing special permission from the Head of the Music Department.

Recitals

Faculty recitals and Senior Graduation recitals are given on Sunday evening in Edward Russ and Chapin Halls. Student recitals are given bi-monthly on Friday afternoons. All music students are required to perform in recitals as directed by their applied music teachers and to attend at least two-thirds of these recitals.

The Music Minor of Eighteen Semester-Hours

The music minor prepares the student to teach vocal or instrumental music in combination with academic subjects in the secondary schools. The music minor is begun in the sophomore year and presupposes a major in an academic subject. English and social studies are the academic subjects most frequently combined with music.

Students who wish to minor in music should consult with the Head of the Music Department early in the freshman year in order to make up any deficiencies. Music minors are required to meet a minimum standard in piano and to participate in one musical organization throughout the three years.

The following courses are required of all music minors: Music 101, 102, 201, 202, 207 or 208, and 401. Three semester-hours in restricted music electives may be chosen as follows: For instrumentalists—Music 205A, 205B, 206A, 206B, 309; for vocalists—Music 301, 320, 429.

Piano is required without credit.

Music for the General Student

The cultural obligation of the teacher has long been recognized. Teacher education has become increasingly a matter of providing rich cultural backgrounds upon which the teaching of a given subject may be projected. For this reason all students except music majors are required to take MUSIC 100, Music Appreciation. In addition, the general student may elect courses in music history and literature in the junior and senior year. Whenever possible, the content of these courses is related to the student's major field.

All general students are given a music placement test. On the evidence of this test, they are advised to participate in the musical organizations of the College such as the *a cappella* choir, orchestra, band, or Opera Workshop.

Pipe Organ

The College owns two pipe organs: the great four-manual Moeller Organ in the Memorial Auditorium, and the Clarence O.S. Howe three-manual Austin Organ in Edward Russ Hall. Frequent organ concerts are given by visiting organists, faculty, and advanced organ students.

Instrument Rental

A charge of \$12.50 a semester will be made for those students who wish to rent College-owned instruments for use in instrumental classes in MUSIC 205A, 205B, 206A, 206B, and 309. The same charge will be made for rental of instruments during the summer.

THE FIRST YEAR

The student begins his career as a music major with Sight Reading and Ear Training, the primary and secondary instruments, and participates in the various musical organizations of the College.

General Education Course**MUSIC 100. *Music Appreciation***

For a description of this course, see page 49.

Credit: 2 semester-hours

Music Major Courses**MUSIC 101. *Sight Reading and Ear Training***

This course aims to develop basic skills in music reading. It includes notation and terminology, major and minor scales, intervals, triads, ear and eye recognition of commonly used tonal and rhythmic groups, and written dictation of a standard repertory of thematic materials. This course meets three hours weekly and is credited on a laboratory basis.

Credit: 2 semester-hours

MUSIC 102. *Advanced Sight Reading and Ear Training*

This course is a continuation of MUSIC 101. It includes a study of the more difficult tonal and rhythmic groups, reading parts in various clefs, harmonic ear training, and dictation. The subject-matter is taught through standard song literature, including folk and art song, choral and oratorio. This course meets three hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 101

Credit: 2 semester-hours

MUSIC 103. *Primary Instrument, Part I*

Credit: 1 semester-hour

MUSIC 104. *Primary Instrument, Part II*

Credit: 1 semester-hour

MUSIC 105A. *Secondary Instrument, Part I*

Credit: ½ semester-hour

MUSIC 105B. *Secondary Instrument, Part II*

Credit: ½ semester-hour

MUSIC 130A and B. *A Cappella Choir***MUSIC 131A and B. *Orchestra*****MUSIC 132A and B. *Band***

The student selects two of the above organizations. Each organization meets two hours weekly.

Credit: 0 semester-hour

THE SECOND YEAR

In the second year the music major continues work on the primary and secondary instruments and takes Harmony and Epochs in Musical Development.

MUSIC 201. *Harmony*

This course aims to give a practical treatment of harmony as related to the classroom. It includes a study of rhythms, intervals, primary and secondary triads, seventh chords, inversions, diatonic and chromatic progressions. Special attention is given to the functional aspects of harmony as applied to the piano keyboard in the harmonization of melodies, transposition, and improvisation of accompaniments.

Prerequisite: MUSIC 102

Credit: 3 semester-hours

MUSIC 202. *Advanced Harmony*

This course is a continuation of MUSIC 201. It includes a study of foreign chords, altered chords, modulation, enharmonic tones, and the rhythmic and harmonic principles of musical form. Application is made in four-part writing, in harmonic analysis, and on the piano keyboard.

Prerequisite: MUSIC 201

Credit: 3 semester-hours

MUSIC 203. *Primary Instrument, Part III*

This course is a continuation of MUSIC 104.

Credit: 1 semester-hour

MUSIC 204. *Primary Instrument, Part IV*

Credit: 1 semester-hour

MUSIC 205A. *String Instruments, I*

This course develops elementary playing skills on string instruments. The violin is the basic instrument for this course for all students who have not had previous string experience. The materials and methods used are those recommended in the teaching of these instruments in the classroom. Special attention is given to various problems likely to occur in the organization of beginning string classes in the public school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 102

Credit: 1 semester-hour

MUSIC 205B. *String Instruments, II*

This course is a continuation of Music 205A. It aims to develop string playing beyond elementary level and includes the higher positions, bowing techniques, and vibrato. Opportunity is given to the student to become familiar with the viola, cello, and double bass. Students learn a repertory of folk song and elementary ensemble pieces suitable for grade school use. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 205A

Credit: 1 semester-hour

MUSIC 206A. *Woodwind Instruments*

This course develops elementary playing skills on the clarinet, flute, oboe, and other woodwind instruments. The materials and methods used are those recommended in the teaching of these instruments in the classroom. Special attention is given to the various problems likely to occur in the organization of the beginning woodwind classes in the public school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 206B. *Percussion Instruments*

This course develops elementary playing skills on the snare drum, bass drum, tympani, cymbals, bells, etc. The materials and methods are those recommended in the teaching of these instruments in the classroom. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 207. *Epochs in Musical Development, Part I*

This course makes a study of the medieval and polyphonic epochs in musical development. It deals with music in Greek culture, music of the early Christian Church, secular music makers of the Middle Ages, music of the Renaissance, the rise of instrumental music, and the growth of choral polyphony culminating in the works of Bach and Handel. Students make a chronological chart showing parallel developments in music, art, literature, and history.

Credit: 2 semester-hours

MUSIC 208. *Epochs in Musical Development, Part II*

This is a continuation of Music 207, and makes a study of the classic and early romantic epochs in musical development. It includes study of the music of Haydn, Mozart, Beethoven, Schubert, Schumann, Brahms, Berlioz, and Liszt. This course is professionalized for use in teaching music appreciation in the classroom.

Credit: 2 semester-hours

MUSIC 210A. *Secondary Instrument, Part III*

This is a continuation of MUSIC 105B.

Credit: 1/2 semester-hour

MUSIC 210B. *Secondary Instrument, Part IV*

Credit: 1/2 semester-hour

MUSIC 230A and B. *A Cappella Choir***MUSIC 231A and B. *Orchestra*****MUSIC 232A and B. *Band*****MUSIC 233A and B. *Music Workshop*****MUSIC 234A and B. *Opera Workshop***

The student selects two of the above organizations. Each organization meets two hours weekly and is credited on a laboratory basis.

Credit: 1/2 semester-hour each

THE THIRD YEAR

The first two years of the music major curriculum have been devoted primarily to developing skills in applied music and to pursuing sequential courses in music theory and history. In the third year the skills and knowledge thus gained are applied in professionalized subject-matter courses in choral and instrumental school music.

MUSIC 301. *Choral Technique*

This course aims to develop the voice of the student through the singing of choral material suitable for use in the high school. It includes a study of the principles of tone production, diction, phrasing, and interpretation, illustrations of which are made in graded song materials for various vocal combinations. Special attention is given to testing and classification of voices, balance of parts, rehearsal routine, accompaniment playing, and conducting. This course includes observation and participation in the College High School Chorus.

Prerequisite: MUSIC 202

Credit: 2 semester-hours

MUSIC 303. *Primary Instrument, Part V*

This course is a continuation of MUSIC 204.

Credit: 1 semester-hour

MUSIC 304. *Primary Instrument, Part VI*

Credit: 1 semester-hour

MUSIC 305. *Orchestration*

This course makes a study of the range, tuning, transposition, and use of all instruments in the orchestra and band. It includes practical arranging for various combinations of instruments and the completion of a full score for band or orchestra. Special attention is given to the playing and transposition of parts at the keyboard.

This course includes observation in the College Orchestra and the College Band.

Prerequisites: MUSIC 205A, 205B, and 206A

Credit: 2 semester-hours

MUSIC 306A. *School Orchestras*

This course deals with the organization of school orchestras; the selection, purchase, and care of instruments; tuning procedures; rehearsal techniques; substitution of instruments; elementary conducting; and evaluation of materials. Students learn a repertory of music suitable for use in school orchestras. This course includes off-campus observation of current practices in school orchestras.

Prerequisites: MUSIC 205A and 205B

Credit: 2 semester-hours

MUSIC 306B. *School Bands*

This course deals with the organization of school bands; the selection, purchase, and care of instruments; rehearsal routine; substitution of instruments; elementary conducting; and marching band. Students learn a repertory of music suitable for use in school bands. This course includes off-campus observation of current practices in school bands.

Prerequisite: MUSIC 206A

Credit: 2 semester-hours

MUSIC 307. *Music Form and Analysis*

This course provides application of all branches of music, theory, history, and performance in the analysis of vocal and instrumental forms. It includes a study of two and three part song forms, the dance suite, rondo, variation, and sonata. The materials used in this course are selected with reference to further use in the teaching of music appreciation in the classroom.

Prerequisite: MUSIC 202

Credit: 2 semester-hours

MUSIC 308. *Voice for Instrumentalists*

This course is conducted as a laboratory class to provide instrumentalists with basic voice training. It is concerned primarily with the development of the individual voice and includes a study of the principles of tone production,

breathing, diction, phrasing, and interpretation. The song material and teaching procedure used in this course are those recommended in the teaching of voice class in the senior high school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 309. *Brasswind Instruments*

This course develops elementary playing skills on trumpet, horn, trombone, and other brasswind instruments. The materials and procedures used are those recommended in the teaching of these instruments in the classroom. Special attention is given to the various problems likely to occur in the organization of beginning brasswind classes in the public school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 310A. *Secondary Instrument, Piano*

Credit: 1/2 semester-hour

MUSIC 310B. *Secondary Instrument, Piano*

Credit: 1/2 semester-hour

MUSIC 320. *Teaching Music in the Elementary School Grades, 1-6*

This course deals with the principles, materials, and methods used in teaching music in the elementary grades. It includes child voice, remedial aids for non-singers, rhythms, creative expression, discriminating listening, development of music reading, part singing, music dramatics, and the integration of music with other subjects in the curriculum. Special attention is given to the beginning choral and instrumental program in the elementary school.

Prerequisite: MUSIC 202

Credit: 3 semester-hours

MUSIC 330A and B. *A Cappella Choir*

MUSIC 331A and B. *Orchestra*

MUSIC 332A and B. *Band*

MUSIC 333A and B. *Music Workshop*

MUSIC 334A and B. *Opera Workshop*

The student selects two of the above organizations. Each organization meets two hours weekly and is credited on a laboratory basis.

Credit: 1/2 semester-hour each

THE FOURTH YEAR

In the first semester of the fourth year the student gives his graduation recital in his primary instrument, and completes the required courses in music history, theory, and pedagogy prior to entering student teaching. The first ten weeks of the second semester are spent in teaching music in the elementary and secondary school. Upon return to the campus, the student may carry his professional preparation still further by electing music courses in his field of special interest.

MUSIC 401. *The Teaching of Music in Secondary Schools*

This course deals with the aims, content, and procedure in the teaching of music in the junior and senior high schools. It includes a study of general and elective music courses, extra-curricular music activities, and music for special programs. Attention is given to the coordination of the choral and instrumental program with music appreciation and music theory. Lesson plans and units of work are prepared for use in the classroom.

This course includes observation and participation in the College High School.

Prerequisite: MUSIC 320

Credit: 3 semester-hours

MUSIC 402. *Primary Instrument, Part VII and Senior Recital*

This course is a continuation of MUSIC 304.

Credit: 1 semester-hour

ELECTIVES**MUSIC 337. *The Opera***

This course makes a study of representative Italian, French, and German operas. It includes a class analysis of each opera and the illustration of its principal numbers by means of recorded music and the piano. Special attention is given to those operas presented in the junior performances at the Metropolitan Opera, New York City.

Credit: 2 semester-hours

MUSIC 338. *The Symphony*

This course makes a study of representative symphonies, orchestral suites, overtures and tone poems by classic, romantic, and modern composers. Musical illustrations are given by means of recorded music and the piano. The content of this course is related to the Youth Concerts at Carnegie Hall, New York City.

Credit: 2 semester-hours

MUSIC 405. *Orchestra Conducting and Score Reading*

This course aims to develop skills in orchestra conducting and score reading. It includes a study of the particular type of ear training needed in conducting, the technique of the baton, score reading, and interpretation. A special feature of this course is the presentation of a large amount of musical examples taken from standard repertory which contain practically all technical and psychological problems which face the conductor. Practical experience in conducting is given in the College High School Orchestra and the College Orchestra.

Prerequisites: MUSIC 305 and 306A or equivalent

Credit: 2 semester-hours

MUSIC 406. *Epochs in Musical Development, Part III*

This course is a continuation of MUSIC 208 and makes a study of the late romantic period and the rise of modern music. It includes a study of the music of Richard Strauss, Bruckner, Prokofieff, Mahler, Debussy, Tschai-kowsky, Mussorgsky, Stravinsky, Schoenberg, Bartok, and Hindemith.

This course is professionalized for use in the teaching of music appreciation in the classroom.

Credit: 2 semester-hours

MUSIC 407. *The Development of the Opera*

This course deals with the origin, development, and characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools. The content of this course is related to the Saturday afternoon broadcasts from the Metropolitan Opera, New York City. Special attention is given to building an ear repertory of operatic music heard over the radio.

Credit: 2 semester-hours

MUSIC 408. *Wagner Music Dramas*

This course deals with the operas and music dramas of Richard Wagner. It includes a study of Wagner's artistic ideals and their application to his compositions. Special attention is given to those works which have their sources in great literature, as the Ring of Nibelung, Parsifal, and Tristan and Isolde. This course carries field work at the Metropolitan Opera, New York City.

Credit: 2 semester-hours

MUSIC 409. *Counterpoint*

This course aims to provide a practical treatment of counterpoint for music students. It includes analysis of the works of the Sixteenth Century masters of vocal polyphony with enough of original work to insure a grasp of the principles involved. Functional aspects are stressed in the writing of inner voice parts, descant, round, and canon.

Prerequisite: MUSIC 307

Credit: 2 semester-hours

MUSIC 410. *Composition*

This course aims to develop the creative power of the student in the composition of small vocal and instrumental forms. Special attention is given to the functional aspects of composition in word setting, writing accompaniments, and improvisation. Selected compositions are performed in concert at the close of the course.

Prerequisite: MUSIC 307

Credit: 2 semester-hours

MUSIC 413. *Masters of the Symphony*

This course aims to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, and Brahms. The content of this course is related to the weekly broadcasts of the Philharmonic Symphony Orchestra of New York.

Credit: 2 semester-hours

MUSIC 414. *Modern Symphonic Forms*

This includes a study of the post-romantic symphonies of Bruckner, Mahler, Dvorak, Franck, Tschaiowsky, and Sibelius; the symphonic poems of Strauss, Smetana, and Debussy; and the orchestral suites of Rimsky-Korsakoff, Ravel, and Stravinsky. Special attention is given to building an ear repertory of symphonic music heard over the radio.

Credit: 2 semester-hours

MUSIC 416. *Music in Modern Society*

This course aims to interpret the nature, function, and forms of music in modern society in terms of the social, political, and cultural forces which have shaped it. It includes a study of the music of the church, royal patrons of music, nationalism in music, music and politics, music and industry, and music and entertainment. Because of the social interpretation given music, this course is particularly recommended to majors in the social studies.

Credit: 2 semester-hours

MUSIC 418. *Music of Russia*

This course provides a survey of Russian music from the Czarist regime to the modern Soviet. It aims to interpret Russian music in terms of the social, political, and cultural forces which have shaped it.

Credit: 2 semester-hours

MUSIC 420. *The Art Song*

This course provides a survey of the art song and includes a detailed study of the art songs of Beethoven, Schubert, Schumann, Brahms, Wolf, and Strauss. Special attention is given to the relation of music and poetry. A feature of this course is the performance of art songs by guests of the class and attendance at art-song recitals in New York City.

Credit: 2 semester-hours

MUSIC 422. *Chamber Music*

This course provides a survey of chamber music and includes a detailed study of the string trio, quartet, and quintet by classic, romantic, and modern composers. The content of this course is related to the Sunday afternoon broadcasts of the New Friends of Music and Frick Art Museum concerts in New York City.

Credit: 2 semester-hours

MUSIC 423. *Choral Masterworks*

This course provides a survey of choral masterworks from Palestrina to Stravinsky. It includes a detailed study of Bach's *B Minor Mass*, *St. Matthew Passion*, Handel's *Messiah*, Beethoven's *Missa Solemnis*, Mendelssohn's *Elijah*, Verdi's *Requiem*, and other great choral works. The content of this course is related to the current musical season in New York City.

Credit: 2 semester-hours

MUSIC 424. *A Survey of Wind Instrument Music*

This course includes music for full band, small ensembles, and solos with emphasis on literature available for brass and woodwind players in high school. A laboratory band as well as numerous small ensemble groups are formed by members of the class so that performance of all music under consideration is possible. Special attention is given the music originally composed for wind instruments. New music from all publishers is available for examination and evaluation.

Prerequisite: MUSIC 306B

Credit: 4 semester-hours

MUSIC 425. *Music of the Romantic Period*

This course deals with the romantic spirit in music as expressed in the works of Schubert, Schumann, Mendelssohn, Chopin, Berlioz, Liszt, and others. It includes a study of program music, piano and song literature, and the rise of national schools of musical composition. Representative works are studied through performance recordings, and radio listening. Special attention is given to parallel aspects of Romanticism in literature and the visual arts.

Credit: 2 semester-hours

MUSIC 426. *Survey of Music Literature*

This is a survey course in music literature and includes a study of folk song, art song, oratorio, opera, idealized dance forms, instrumental suite, sonata, symphony, and symphonic poem. Abundant use of musical illustration, directed listening, and music making acquaint the student with great masterpieces of music which should be the possession of every generally cultured person. This course is designed for the general student and aims to make intelligent and appreciative consumers of music. It is a non-technical course

and attempts to make intelligent and appreciative radio-listeners and concert goers. Special attention is given to the relation of music to English literature and social studies.

Credit: 2 semester-hours

MUSIC 428. *Music of Twelve Great Nations*

This course aims to increase understanding among people through a study of the folk and related art music of twelve great nations. Special attention is given to the social, economic, political, and cultural backgrounds of the music of these nations. Because of the social implications of this music this course is recommended particularly to teachers of the social studies. Musical illustrations are given at the piano, through group singing, and through recordings.

Credit: 2 semester-hours

MUSIC 429. *A Cappella Choir and Choral Conducting*

This course deals with the theory and practice of the *a cappella choir*. It includes a study of the principles of group tone production, phonetics as related to singing, tuning, posture, techniques of choral conducting, interpretation, and score reading. A feature of this course is the study of a selected list of choral literature suitable for use in school, church, and community. Outstanding students are given an opportunity to conduct the College *A Cappella Choir*.

Prerequisite: MUSIC 301

Credit: 2 semester-hours

MUSIC 430A. *A Cappella Choir*

MUSIC 431A. *Orchestra*

MUSIC 432A. *Band*

MUSIC 433A. *Music Workshop*

MUSIC 434A. *Opera Workshop*

The student selects two of the above organizations. Each organization meets two hours weekly and is credited on a laboratory basis.

Credit: 1/2 semester-hour each

MUSIC 460. *Musical Studies in Europe*

This field-study course gives an opportunity to study by direct observation major European musical events of the summer season together with visits to famous places in the history of music. Beginning on July 2nd the tour extends to September 3rd covering the countries of France, Germany, Austria, Switzerland, the Netherlands, and Italy. Among many other things opportunities are provided to attend the Richard Wagner Festival in Bayreuth and the Salzburg Musical Festival and to visit the musical shrines and museums in Vienna and the LaScala Opera House and museum in Milan. Famous places

such as London, Paris, Rome, Florence, Venice, Amsterdam, Frankfurt, Stuttgart, and Lucerne are included in the itinerary. Students who are registered for credit are required to present a written report at the end of the trip.

Credit: 6 semester-hours

MUSIC 490. *Survey of Choral Materials for Use in Public Schools*

This course provides a survey of the choral repertoire for accompanied and a cappella groups, for changed, unchanged, changing, and mixed voices. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances, are an integral part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire. The course also includes historical and stylistic characteristics of the choral repertoire. Materials for small groups as well as the large ones are studied.

Prerequisites: MUSIC 301 and 429 or their equivalents

Credit: 2 semester-hours

MUSIC 491. *Methods and Materials for Teaching Woodwind Instruments*

This course covers the pedagogy of all the woodwind instruments: flute, oboe, clarinet, bassoon, and saxophone. Attention is given to the problems of teaching individual students and to class procedures. Demonstration lessons, with criticism by instructor and students are provided. Woodwind literature is presented in all aspects, including study materials, solos, and ensemble music. Equipment is studied with reference to the selection, purchase, care, and adjustment of all woodwind instruments, mouthpieces, and reeds.

Credit: 2 semester-hours

MUSIC 499A. *Problems in the Teaching of School Music*

This is a post-student teaching course. It aims to (1) evaluate student-teaching experiences; (2) give an opportunity to the student to share with his classmates the problems encountered in student teaching and to seek a possible solution for the same; (3) meet shortages in teacher preparation not provided for in previous courses; (4) give the student a unified view of school-music education before he enters the teaching field. The content of this course is determined largely by the expressed needs of the students.

Credit: 2 semester-hours

MUSIC 499B. *Workshop in School Music*

This course is designed primarily for music teachers-in-service who wish to work out projects for use in their respective schools. The content of this course is determined by needs in the field. It may include folk-song dramatizations, small vocal and instrumental ensembles, the integration of music with other subjects in the curriculum, music for boys, visual aids in music pageants, festivals, and materials for special programs. This course provides the teacher with a number of units of work suitable for classroom use.

Credit: 2 semester-hours

PANZER SCHOOL OF PHYSICAL EDUCATION AND HYGIENE

History

Panzer College of Physical Education and Hygiene was founded in September, 1917. Its inception followed passage of The Pierson Act, a law which made physical education compulsory in the public schools of the State. The founders were men and women interested in a program of teacher-education to provide instructors in physical training and hygiene for the public schools.

Established in Newark—where it was known as the Newark Normal School of Physical Education and Hygiene—the institution offered a two-year course for men and women planning to teach physical education and hygiene.

In 1919 the Board of Trustees named Henry Panzer President. In 1926, the school was relocated in East Orange. In 1928, the State Board of Education approved a four-year course and authorized the College to grant the degree of Bachelor of Physical Education. In the same year, the name was changed to Panzer College of Physical Education and Hygiene. In 1939, the State Board authorized the conferral of the degree of Bachelor of Science in Education.

The College functioned under the direction of a seven-member board of trustees. An active alumni association and an auxiliary-patrons association provided support for the program and activities of the institution.

From 1921 through the academic year, 1957-1958, Dr. Margaret C. Brown served as College president. An outstanding leader, Dr. Brown is the recipient of many awards from local and national organizations in the field of health, recreation, and physical education.

In 1958—when Panzer realized the need for increasing the number of physical education teachers but could not expand its facilities—the Board of Trustees of the College requested that the Panzer program be incorporated with that of the Montclair State College. The State Board—recognizing the fact that Montclair offered a minor in physical education and that a new gymnasium had recently been completed on its campus—deemed the request “in the best interests of the educational program of the State.” Therefore, on February 5, the State Board adopted a resolution stipulating that, effective August 1, 1958, Panzer College be consolidated with Montclair State College.

As a result of the merger, Panzer College became the Panzer School of Physical Education and Hygiene at Montclair State College. All Panzer students in good academic standing became eligible for transfer and matriculation. The Panzer library, laboratory, and academic equipment were moved to the Montclair campus.

The School of Physical Education and Hygiene functions as a regular department of the College. Students majoring in physical education—except those in the graduating classes of 1958, 1959, and 1960—will adhere to the new curriculum adopted by the six New Jersey State Colleges. Students transferring from Panzer will follow a program based on (1) courses already

completed at Panzer, and (2) requirements in general and professional education of the Montclair curriculum adapted to the needs of the students who are transferred.

Physical education majors admitted in September, 1958, will follow the curriculum prescribed for all undergraduates at Montclair.

Objectives

The objectives of Panzer College—as stated in the most recent edition of the catalog—are consonant with those of Montclair. The basic aim of the new program will be to educate teachers of health, physical education, and recreation for positions in schools, playgrounds, recreation centers, and social institutions. The standards of admission and scholarship will be the same for physical education majors as they are for all students. (General objectives and standards are described in special sections at the beginning of this Bulletin).

The faculty of the Panzer School, by directing the required program of physical education activities and health education, will serve the entire student body. In addition, the faculty will supervise the program of intra-mural and varsity and intercollegiate sports, all of which will be open to students on an extra-curricular basis.

The Major Program

At the time this catalog goes to press, the major program is still in the stages of development. The curriculum which is planned at this time will provide specialization in physical education and the minimum of eighteen semester-hours in health education for teaching certification. Departmental electives to be offered in the future will enable students, who so desire, to increase the total of credits in either physical education or health by use of free elective hours available in the regular curriculum pattern.

Courses now offered in the College are listed in the following pages. The complete major requirements will be published in a supplemental bulletin as soon as this curriculum is approved. The minor program will continue as listed in this section for the classes graduating in 1959 and 1960.

The Required Program

HEALTH EDUCATION 100. *Healthful Living* ✓

For a description of this course, see page 50.

Credit: 2 semester-hours

PHYSICAL EDUCATION 100A & B. *Physical Education Activities* ✓

The work of the freshman year consists of an orientation program whereby the students are provided with an opportunity to become acquainted with a variety of team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: $\frac{1}{2}$ semester-hour each

PHYSICAL EDUCATION 200A & B. *Physical Education Activities*

✓ The work of the sophomore year permits the student to select within a given pattern team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: 1½ semester-hour each

Each student is given a yearly health examination by a physician who determines the fitness of the student to participate in the general program.

Regulation costume is required of all students.

HEALTH EDUCATION**HEALTH EDUCATION 207. *Safety Education***

This course is designed to prepare teachers for a relatively new field in education. Opportunities are presented for acquiring knowledges and skills related to safety in the school buildings, on the school grounds, and going to and from school.

Credit: 2 semester-hours

HEALTH EDUCATION 401. *Methods and Materials in Health Education*

This course prepares the teacher to assume the responsibility for organizing and conducting a program of health instruction. The coordination of health with other subject-matter fields and the evaluation of textbooks and audio-visual materials are given special consideration.

Credit: 2 semester-hours

HEALTH EDUCATION 407. *Prevention and Care of Athletic Injuries*

This is a lecture and laboratory course designed to acquaint the student with ways to prevent and care for the common injuries sustained in athletics. Attention is given to sprains, strains, bruises, burns, and fractures. The responsibility of the coach in caring for injuries is emphasized.

Credit: 2 semester-hours

HEALTH EDUCATION 408. *Driver Education***PART I**

This part consists of a minimum of 40 hours of class recitations and discussions for which home reading and study have been assigned. The following topics are included: (1) history and development of driver education and training programs; (2) objectives of driver education; (3) local, state, and national traffic-safety programs; (4) driver qualifications; (5) psychophysical testing; (6) curricular content of school courses in driver education and training; (7) construction, operation, and maintenance of automobiles; (8) traffic laws and driver licensing; (9) traffic engineering; (10) pedestrian

education and protection; (11) equipment for teaching driver education; (12) liability, costs, and insurance; (13) planning driver education as a part of the daily program of the high school; (14) public relations; (15) records and reports; and (16) visual aids in teaching driver education.

PART II

This part consists of a minimum of 20 hours devoted to the following: (1) behind-the-wheel instruction; (2) demonstrations and student-teacher practice in the car; and (3) road tests in traffic. Home reading and study are required in preparation for these projects.

Prerequisite: Driver's license with three years of driving experience with satisfactory driving record.

Credit: 3 semester-hours

HEALTH EDUCATION 411. *School Health Services*

The student is familiarized with the health services available in the school. The part which the teacher plays in coordinating his activities with the school medical staff is emphasized.

Credit: 2 semester-hours

The Minor Program

With the required courses in health and physical education as prerequisites additional courses are offered which will prepare teachers of physical education. On successful completion of the curriculum the student is eligible to be certified to teach physical education in junior and senior high school.

Students interested in the field should arrange for an appointment with a division head of the department before undertaking the program.

It is suggested that students minoring in the department should obtain outside experience by working either in schools, playgrounds, camps, or recreation centers.

PHYSICAL EDUCATION

The curriculum has been organized for men and women who may desire to teach physical education, to coach athletic teams, or to assume leadership in physical education activities in school, camp, club, or playground.

Students who are minors are expected to assist in administering the physical education and sports program of the College and the College High School. While it is not a prerequisite that the men be members of the College athletic teams, or that the women participate in extra-curricular sports and Dance Club, such participation is highly recommended.

The following courses are required for all physical-education minors: HEALTH EDUCATION 100; PHYSICAL EDUCATION 100A, 100B, 200A, 200B, 201, 202, 206, 405, and 409; PHYSICAL EDUCATION M307 and M308 for men; PHYSICAL EDUCATION W307, W308, and 314 for women. The follow-

ing courses are elective: HEALTH EDUCATION 407; and PHYSICAL EDUCATION 203, 313, 410. Physical-education minors must elect at least one of the foregoing electives in order to complete the physical-education minor. Students in the Physical Education Department, as well as other qualified individuals, may elect these courses upon approval by the Department Head.

PHYSICAL EDUCATION 201. *Physiology of Exercise* ✓

This course deals with the physiological effects of activity upon the human organism; the reaction of exercises of speed, strength, and endurance upon the circulatory, respiratory, and muscular systems; and the causes of fatigue, staleness, and exhaustion. The effects of alcohol, stimulants, and ergogenic aids on the body are considered.

Credit: 2 semester-hours

PHYSICAL EDUCATION 202. *History and Principles of Physical Education* ✓

This course considers the scientific foundations of physical education, aims and objectives, and the place of physical education in the educational program. Reference is given to skill, interpretative, and emotional development, and to individual adjustment to standards.

Credit: 2 semester-hours

PHYSICAL EDUCATION 203. *Individual and Dual Sports*

This course is designed to give the student experience and practice in a variety of individual and dual sports. It stresses fundamental techniques used in the teaching of golf, tennis, archery, badminton, bowling, and other dual activities for men and women.

This course meets for three hours weekly and is credited on a laboratory basis.

Credit: 2 semester-hours

PHYSICAL EDUCATION 206. *Methods of Teaching Games* ✓

In this course the student is taught the rules, techniques, and methods of playing and teaching games in junior and senior high school.

Credit: 2 semester-hours

PHYSICAL EDUCATION M307-308. *Methods of Coaching and Officiating* ✓

The offensive and defensive strategy of the various varsity sports are discussed in season. A knowledge of the rules and techniques of officiating the various sports, together with actual experience in coaching and officiating are required.

This course meets for four hours weekly and is credited on a laboratory basis. It runs for two semesters.

Credit: 3 semester-hours each

PHYSICAL EDUCATION W307-308. *Methods in Sports for Women*

The purpose of this course is to present the skill techniques and coaching and officiating methods essential for successful teaching of girls' sports in high school. Such active participation as is necessary is required.

This course meets for three hours weekly and is credited on a laboratory basis. It runs for two semesters.

Credit: 2 semester-hours each

PHYSICAL EDUCATION 313. *Methods of Teaching Folk and Square Dancing*

This course is designed to familiarize the prospective teacher with the recreational, aesthetic, and physical values of folk and square dancing. Students learn how to teach the elements of these dances, how to call and to lead, where to secure recordings and dance descriptions. Dances suitable for various age levels and degrees of competence are included.

Credit: 2 semester-hours

PHYSICAL EDUCATION 314. *Theory and Practice of Modern Dance*

This elective course provides experience in group and individual activity in both techniques and choreography. Through discussion the student develops an appreciation of the dance as an art form. The course is open both to men and women.

Credit: 2 semester-hours

PHYSICAL EDUCATION 405. *Methods and Materials of Physical Education in the Secondary Schools* ✓

Analysis of the program of physical education in the secondary school; criteria for the selection and grade placement of activity; consideration of method and teaching techniques; construction of teaching units and lesson plans; and problems relating to program planning, time allotment, facilities, sources of material, and program evaluation constitute the content of this course.

Credit: 2 semester-hours

PHYSICAL EDUCATION 409. *Organization and Administration of Physical Education* ✓

The details of organizing the units of the physical-education program are discussed. Various topics, such as legislation, financing, curriculum construction, grading, excuses, plant facilities, supplies and equipment, and office management are considered.

Credit: 2 semester-hours

PHYSICAL EDUCATION 410. *Water Safety and First Aid*

This course includes intensive instruction in swimming, diving, water sports, boating, canoeing, water safety, and first aid. Students can qualify for Red Cross certification during this course.

Credit: 2 semester-hours

THE DEPARTMENT OF SCIENCE

Students who are interested in preparing themselves to teach science in high school should consider carefully the present-day requirements for this kind of work. As a result of careful investigations we have extensive information concerning the activities of science teachers in secondary schools. It is not wise for a student to take work in one science only since full-time teaching positions in a single subject are seldom open to a first-year teacher. Most beginners teach two or more science subjects and often a non-science subject as part of the instructional load. It is, therefore, required that a student major in one branch of science and minor in another.

Since it is found by careful investigation that mathematics appears more frequently than any other subject in the combinations of subjects taught by science teachers, students specializing in science should plan to include as many mathematics courses as possible in the undergraduate program.

SCIENCE MAJOR—BIOLOGICAL SCIENCE SPECIALIZATION

FRESHMAN YEAR

Fall Semester	S.H.	Spring Semester	S.H.
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
Math. 103 <i>Mathematical Analysis, I</i>	3	Math. 104 <i>Mathematical Analysis, II</i>	3
BIOL. 101 <i>GENERAL BOTANY, I</i>	4	BIOL. 102 <i>GENERAL BOTANY, II</i>	4
	<hr/> 16½		<hr/> 15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
BIOL. 201 <i>GENERAL ZOOLOGY, I</i>	4	BIOL. 202 <i>GENERAL ZOOLOGY, II</i>	4
CHEM. 101 <i>GENERAL COLLEGE CHEMISTRY, I</i>	4	CHEM. 102 <i>GENERAL COLLEGE CHEMISTRY, II</i>	4
	<hr/> 16½		<hr/> 16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Mus. 100 <i>Music Appreciation</i>	2	Lang. 300 <i>Foundations of Language</i>	2
Electives	4	Electives	4
CHEM. 405 <i>ORGANIC CHEMISTRY, I.</i>	4	CHEM. 406 <i>ORGANIC CHEMISTRY, II (or 4)</i>	3
PHYS. 101 <i>GENERAL COLLEGE PHYSICS, I</i>	4	PHYS. 102 <i>GENERAL COLLEGE PHYSICS, II</i>	4

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Eng. 100G <i>Western World Literature</i>	3	Ed. 4.. <i>Education Elective</i>	3
Elective	2	Elective—Humanities	2
SCI. 401 TEACHING OF SCIENCE IN SECONDARY SCHOOL	3	Elective	2
PHYS. 402 MAGNETISM AND ELECTRICITY	4		

15

Total: 128 semester-hours

SCIENCE MAJOR—PHYSICAL SCIENCE SPECIALIZATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts.</i>	3	Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
Math. 103 <i>Mathematical Analysis, I</i>	3	Math. 104 <i>Mathematical Analysis, II</i>	3
CHEM. 101 GENERAL COLLEGE CHEMISTRY, I	4	CHEM. 102 GENERAL COLLEGE CHEMISTRY, II	4

16½

15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
PHYS. 101 GENERAL COLLEGE PHYSICS, I	4	PHYS. 102 GENERAL COLLEGE PHYSICS, II	4
BIOL. 101 GENERAL BOTANY, I.....	4	BIOL. 102 GENERAL BOTANY, II (or 4)	3

16½

15½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Mus. 100 <i>Music Appreciation</i>	2
*Electives	4	Electives	4
CHEM. 405 ORGANIC CHEMISTRY, I..	4	CHEM. 406 ORGANIC CHEMISTRY, II	4
BIOL. 201 GENERAL ZOOLOGY, I.....	4	BIOL. 202 GENERAL ZOOLOGY, II (or 4)	3

17

16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Eng. 100G <i>Western World Literature</i>	3	Ed. 4.. <i>Education Elective</i>	3
Elective	2	Elective—Humanities	2
SCI. 401 TEACHING OF SCIENCE IN SECONDARY SCHOOL	3	Elective	2
*PHYS. 402 MAGNETISM AND ELECTRICITY	4		

15

Total: 128 semester-hours

* Those specializing in physics should take Physics 402 in place of an elective in the fall semester of the junior year. This will then leave four semester-hours more for electives in the fall semester of the senior year.

Students who major in another department and minor in a science field secure approval of the minor program by consultation with the Chairman of the Science Department.

In addition to the minimum program as outlined above the science majors have a regular program of visits to the high-school science courses in the College High School as follows:

<i>Freshman Year</i>	One visit each week during the school year in Junior-high-school science classes
<i>Sophomore Year</i>	One visit each week in the high-school biology course
<i>Junior Year</i>	One visit each week in either chemistry or physics classes
<i>Senior Year</i>	In the fall semester seniors pursue three high-school observations by special assignments in the six-year science program.

THE FIRST YEAR

The first year is planned to give the student an insight into the role that science has played and is still playing in the drama of life. Specialization during this year begins with work in biology.

MATHEMATICS 103 and 104. *Mathematics for Science Majors*

For a description of this course, see page 131.

Credit: 3 semester-hours each

SCIENCE 100C. *The Earth Sciences*

For a description of this course, see page 50.

Credit: 2 semester-hours

BIOLOGY 101 and 102. *General Botany (Morphology and Physiology of Flowering and Non-Flowering Plants)*

This course acquaints the student with the methods and tools of science and develops an understanding of the importance of plants to mankind. Morphology and physiology of the cell and of the plant as a whole are considered first. A survey of the plant kingdom with emphasis on structural development and economic importance follows in the second semester.

Credit: 4 semester-hours each

Physical science majors are permitted to take the second semester of General Botany for three semester-hours of credit. These students will enroll for BIOLOGY 102A. The laboratory work for BIOLOGY 102A involves two clock hours per week in lieu of the four clock hours required for those students enrolling in BIOLOGY 102.

BIOLOGY 102A. *General Botany (Morphology and Physiology of Flowering and Non-Flowering Plants)*

Please see description for BIOLOGY 102. BIOLOGY 102A involves a weekly laboratory of two clock hours.

Credit: 3 semester-hours

Science Course for Home Economics Majors

CHEMISTRY 103 and 104. *Chemistry for Home Economics*

This course provides an opportunity for students of home economics to become acquainted with the major principles of chemistry and their application in the field of home economics. The work of the first semester deals with topics selected from the field of inorganic chemistry. The work of the second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to home economics. The course consists of class discussions, reference work, laboratory and field trips which attempt to show the importance of the contributions of chemistry to the field of home economics.

Credit: 3 semester-hours each

Science Course for Physical Education Majors

CHEMISTRY 105 and 106. *Chemistry for Physical Education*

This course provides an opportunity for students of physical education to become acquainted with the major principles of chemistry and their applications in the field of physical education. The work of the first semester deals with topics selected from the field of inorganic chemistry. The work of the second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to physical education. The course consists of class discussions, reference work, laboratory and field trips which attempt to show the importance of the contributions of chemistry to the field of physical education.

Credit: 3 semester-hours each

THE SECOND YEAR

The science work in this year is planned for both students majoring in the department and for those minoring in the department. Those minoring in the department are advised to take BIOLOGY 101 and 102, or CHEMISTRY 101 and 102, or PHYSICS 101 and 102.

BIOLOGY 201 and 202. *General Zoology (Biology of Invertebrates and Vertebrates)*

The course in general zoology is designed to give students a broad understanding of the important facts regarding animal life that should be of interest to them and to those whom they are to instruct. Students are taught the

peculiarities of structure and physiology of different animal types, and this knowledge is employed as a working basis for deductions made regarding the taxonomy, the economic importance, and the probable course of evolution of the many diverse forms. Particular emphasis is given to the problems connected with man's relations to his environment.

Credit: 4 semester-hours each

Physical science majors are permitted to take the second semester of General Zoology for three semester-hours of credit. Those students will enroll for BIOLOGY 202A. The laboratory work for BIOLOGY 202A involves two clock hours per week in lieu of the four clock hours required for those students enrolling in BIOLOGY 202.

BIOLOGY 202A. *General Zoology (Biology of Invertebrates and Vertebrates)*

Please see description for BIOLOGY 202. BIOLOGY 202A involves a weekly laboratory of two clock hours.

Credit: 3 semester-hours

CHEMISTRY 101 and 102. *General College Chemistry*

The course provides opportunity for mastering the fundamentals of chemistry, for understanding the numerous and far-reaching effects of contributions of chemistry to modern living, for training in scientific method, for developing facility in taking and utilizing laboratory notes, and for learning to use standard reference books. The laboratory contains many experiments of value for demonstration in high-school chemistry. A major portion of the second semester's laboratory work is qualitative analysis. Accompanying such laboratory assignments are supplementary questions requiring reading of library reference books in chemistry.

Credit: 4 semester-hours each

Science Courses for Home Economics Majors

BIOLOGY 209. *Human Biology*

The course is designed for home economics majors. Bodily structure, functioning of parts, how that functioning affects human behavior are all considered. Primary emphasis is placed upon physiology rather than morphology and upon the maintenance of good health of the individual and of the community.

Credit: 3 semester-hours

BIOLOGY 210. *Elementary Bacteriology*

Since the course is designed for the home economics student, it is concerned primarily with these bacteria and fungi associated with food and nutrition sanitation, hygiene, industry, and disease. Identification of the organisms, their economic importance, and their control are emphasized.

Credit: 4 semester-hours

Science Course for Physical Education Majors**BIOLOGY 212. *Mammalian Anatomy for Physical Education***

This course covers a study of tissues, the skeleton, the articulations, the ligaments, and the musculature system of the human body. Correlated exercises on the anatomy of the cat are performed in the laboratory. This course meets for three lecture hours and three laboratory hours each week.

Credit: 4 semester-hours

THE THIRD YEAR

The work in the third year is planned for those who major or minor in science and for those who wish to choose electives in the field of science.

CHEMISTRY 405. *Organic Chemistry*

The course covers the chemistry of carbon compounds and gives increased facility and experience in manipulating complicated chemical apparatus. It treats of the role of chemistry in life processes, including the synthesis and adaptation of carbon compounds in industry, in medicine, and in daily living. The first semester's work covers the chemistry of simple chain compounds and includes fats and carbohydrates.

Credit: 4 semester-hours

CHEMISTRY 406. *Organic Chemistry*

The work of this semester covers the chemistry of multiple functional chain compounds, the ring compounds, proteins, vitamins, hormones, and the application of these compounds in industry, in foods, and in medicine.

Credit: 4 semester-hours

Biological science majors are permitted to take the second semester of Organic Chemistry for three semester-hours of credit. Those students will enroll for CHEMISTRY 406A. The laboratory work for CHEMISTRY 406A involves two clock hours per week in lieu of the four clock hours required for those students enrolling in CHEMISTRY 406.

CHEMISTRY 406A. *Organic Chemistry*

Please see description for CHEMISTRY 406. CHEMISTRY 406A involves a weekly laboratory of two clock hours.

Credit: 3 semester-hours

PHYSICS 101 and 102. *General College Physics*

A study of mechanics of fluids and solids, properties of matter, and heat energy is followed in the second semester by a consideration of sound, theories of light, and electricity and magnetism. The course consists of demonstrations, lectures, discussions, problem-solving, and laboratory experiments.

Credit: 4 semester-hours each

Science Elective Course for Home Economics Majors**PHYSICS 306. *Household Physics***

This course covers the areas of mechanics, heat, electricity, and light. The emphasis throughout is on the applications to equipment used in the home. The course is closely correlated with the work in household equipment in the Home Economics Department. The course consists of demonstrations, lecture-discussions, and laboratory experiments. The laboratory work, wherever possible, is done with common household equipment. The work of the mechanics units develops the fundamentals of machines, and the ideas of work, power, and efficiency; in the heat unit, heating efficiency of stoves, home heating systems, and insulation are covered; in the electrical unit emphasis is on adequate wiring and understanding of the operation of electrical appliances, while the light unit is related to illumination in the home.

Credit: 3 semester-hours

THE FOURTH YEAR

All students majoring in the department are required to take SCIENCE 401, *The Teaching of Science in Secondary Schools*. This course, together with an increased amount of observation and participation in the College High School and with courses in the Education Department, serves as a means of coordinating the entire work of the department and of preparing the student for the work in supervised teaching he is to do in the succeeding semester. The staff members of the department cooperate with the Education Department in supervising this work.

SCIENCE 401. *The Teaching of Science in Secondary Schools*

The chief purposes of this course are: to review the educational objectives of science in public schools; to consider a program of instruction planned for all grades of the public-school system; to study the chief aids to instruction such as texts, manuals, workbooks, tests, and materials for the enrichment of teaching; to make a critical review of standards of classroom and laboratory instruction; to observe junior-high-school classes at work in science; and to participate in classroom activities in biology, chemistry, and physics prior to student-teaching. This course is required of all science majors. Observations are made in the eighth grade science class of the College High School.

Credit: 3 semester-hours

PHYSICS 402. *Magnetism and Electricity*

The most important aims and purposes of the course are as follows: (1) to provide a substantial background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

This course consists of lectures, demonstrations, reference readings, written and oral reports, laboratory experiments with modern electrical instruments, and construction of simple electrical devices. Some of the topics studied are: modern concepts of the electronic structure of matter, electric forces, magnetic fields, potential, resistance, impedance, capacitance, and characteristics of thermionic vacuum tubes.

Prerequisites: PHYSICS 101 and 102

Credit: 4 semester-hours

ELECTIVES

SCIENCE 401D. *The Teaching of Aviation in Secondary Schools*

This course covers the study of state aviation programs, texts, bulletins, free material for school use, demonstration equipment, tests, working models, visual aids, and references needed to teach aerodynamics, aircraft engines, meteorology, navigation, and aircraft communication in high schools. Field trips to airports and aviation industries are included.

Credit: 2 semester-hours

SCIENCE 404. *Problems in the Teaching of Science*

When a student has completed the assignment in student-teaching in a public high school in the State of New Jersey and has accumulated some experience with the problems of high-school science instruction, he returns to the college campus for an intensive study of a limited number of problems in a single field of science. The student concentrates his attention on general science, biology, chemistry, or physics for this period. This course is mainly a study of the published investigations dealing with curriculum construction, evaluation of current practices in junior and senior high-school courses, and the psychology of learning in science.

Credit: 2 semester-hours

SCIENCE 405. *Field and Laboratory Studies in Science*

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e. g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds

of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and illustrating them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course.

Prerequisite: Proficiency in biology and chemistry

Credit: 4 semester-hours

SCIENCE 409. *Senior High School Physical Science Demonstrations*

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations for the teacher.

Credit: 2 semester-hours

SCIENCE 410. *Junior-High-School Science Demonstrations*

This course covers the methods of experimental instruction in grades seven, eight, and nine. A detailed study is made of about three hundred demonstrations.

Credit: 4 semester-hours

SCIENCE 411. *Problems in Field Studies in Science*

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose.

Prerequisites: Field Studies in Science or its equivalent plus at least 12 points of biology

Credit: 2 semester-hours

SCIENCE 412. *Field Studies in Science: Biological*

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

Credit: 2 semester-hours

SCIENCE 413. *Field Studies in Science: Physical*

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil

and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

Credit: 2 semester-hours

SCIENCE 414. *Conservation of Plants and Animals*

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 415. *Conservation of Soil and Water*

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 418. *Three Centuries of Science Progress*

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries. Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role which the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Class demonstrations of historical experiments, readings in the original literature, and lectures and discussions are employed by the three or more science teachers of the course.

Credit: 2 semester-hours

SCIENCE 419. *Field Science and Conservation*

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

Credit: 2 semester-hours

SCIENCE 420. *Water Supply and Conservation Problems*

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, water shed management, stream pollution, and soil erosion gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stoney Brook Watershed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

Credit: 3 semester-hours

BIOLOGY 203. *Introduction to Field Biology*

In this course, the students live for ten days at the New Jersey State School of Conservation in the Stokes State Forest where they have the outdoors as their laboratory. Field trips are made to various types of habitats in order to acquire an understanding of the meaning and significance of a "balanced outdoor society." What occurs when this "balance" is disturbed is observed, and methods of and reasons for it are discussed. Taxonomy, ecology, and conservation are stressed during this concentrated period of outdoor living.

Credit: 2 semester-hours

BIOLOGY 402. *Mammalian Anatomy and Histology*

A study is made of the gross structure of a typical mammal and of the structural peculiarities of its various tissues. Both the anatomical studies and histological studies included in this course are pursued with functional significance strongly emphasized. This course prepares the student for the study of human physiology.

Prerequisite: Eight semester-hours of work in zoology

Credit: 4 semester-hours

BIOLOGY 407. *Comparative Embryology*

A study is made of the stages in development and factors influencing the development of different animal types, particularly the vertebrates. Students in this course follow carefully the development of the chick through the earlier stages. Serial sections of entire chick embryos in different stages of development are prepared by individual students and used as a basis for the study of the development of tissues and organs of the animal. Applications of these details of vertebrate development to the development of the mammal are based on observations made through the dissection of pig embryos.

Prerequisite: Eight semester-hours of work in zoology

Credit: 4 semester-hours

BIOLOGY 408. *Biological Technique*

This course is designed to furnish the prospective teacher of biology with the technical details necessary to enable him as a secondary-school teacher to handle successfully biological materials and experiments and demonstrations in which these materials are employed. Students are trained in methods of collecting and preserving plants and animals for use in the laboratory and classroom. Study is made of the proper methods of preparing illustrative materials with special emphasis laid upon the purpose of these materials.

Prerequisites: Eight semester-hours of work in zoology and four semester-hours of work in botany

Credit: 4 semester-hours

BIOLOGY 409. *Human Physiology*

A study is made of normal and abnormal physiology based on previous study of mammalian anatomy and histology. In addition to an analysis of the part played by organs and tissues in carrying out the essential functions of the body, special attention is given to problems of hygiene and sanitation. Applications of the above problems are made in reference to children of school age, and the physical condition of individual pupils is correlated with their behavior in the classroom.

Prerequisite: A course in vertebrate anatomy or BIOLOGY 402

Credit: 4 semester-hours

BIOLOGY 412. *Genetics*

This course considers the scientific basis of the gene concept and its support in experiments from Mendel's work to the present allegations of the Lysenko School. Documents of some of the milestones in the history of the science are studied, and the adherence to scientific method carefully noted. The wide uses of the science in plant and animal improvement and the discoveries related to man's heredity make an integral part of the study. The course helps the teacher of biology or social studies to discriminate between what is scientifically known and what is political philosophy in genetics. Laboratory exercises supplement lectures and discussion.

An elementary college course in biology is the only prerequisite, and this may be waived in approved cases.

Credit: 2 semester-hours

BIOLOGY 413. *Economic Botany*

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered as well as that of the seed plants.

Credit: 2 semester-hours

BIOLOGY 414. *Field Ornithology*

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats is visited so that one can become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and other problems are also considered.

Prerequisite: A year of biology or the equivalent

Credit: 2 semester-hours

CHEMISTRY 201. *Analytical Chemistry: Qualitative Analysis*

The aims of this course are: a knowledge of the preparation of solutions; the separation and identification of the metallic and non-metallic ions; training in the techniques of careful note taking and interpretation of laboratory manipulation to secure information. The class work covers a systematic study of chemical equilibrium and its use in qualitative analysis. The laboratory work continues the work started in general chemistry and involves the complete analysis of several general unknowns.

Prerequisites: CHEMISTRY 101, 102

Credit: 4 semester-hours

CHEMISTRY 202. *Analytical Chemistry: Quantitative Analysis*

The purposes of the course are: to develop and apply the fundamental principles of solutions; to perfect the techniques of chemistry; to analyze quantitatively substances; to use the chemical balance. The class work covers that chemistry which is needed for gravimetric and volumetric analysis. The laboratory work involves gravimetric analysis, acidimetry and oxidation-reduction reactions.

Prerequisites: CHEMISTRY 101, 102

Credit: 4 semester-hours

CHEMISTRY 203. *Analytical Chemistry: Applied Quantitative Analysis*

The purposes of this course are: to develop techniques needed to use routine methods of analysis of common substances; to give experience in the application of chemistry to soil analysis, blood analysis, food analysis, and household preparations. The class work covers the electrochemical theory of oxidation-reduction, the modern atomic theory and its applications to understanding analytical procedure, theory of colorimetry, and the measuring of hydrogen ions.

Prerequisites: CHEMISTRY 101, 102

Credit: 4 semester-hours

CHEMISTRY 407. *Advanced Quantitative Analysis*

This course is adapted to the needs and preparation of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colorimetric methods; use of organic reagents in analyses; electrometric titrations; conductimetric titrations; spectrographic methods of analysis; electro-deposition of metals; and special methods of analysis.

Prerequisites: General college physics and one semester of quantitative analysis, or special permission of the instructor

Credit: 4 semester-hours

CHEMISTRY 408A. *Industrial Chemistry, Part I*

The purpose of this course is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries in the state. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 408B. *Industrial Chemistry, Part II*

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in CHEMISTRY 408A. Also, a study is made of the economics of chemical industry, chemistry and industry in general, and the effects of chemical discoveries upon living conditions.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 411. *Physical Chemistry, Part I*

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and heterogeneous equilibria.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 412. *Physical Chemistry, Part II*

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical

reactions, atomic structure, molecular structure, and radioactivity.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 413. *Atomic Structure and Atomic Energy*

This is a lecture course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics studied include the following: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; chemical versus atomic explosions; the chain-reacting pile; production of plutonium; detection and measurement of nuclear radiation and incendiary effects of atomic explosions; atomic energy for peace-time uses; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials for atomic energy.

Prerequisites: General college chemistry and general college physics, or special permission of the instructor

Credit: 2 semester-hours

PHYSICS 304. *Introduction to Photography*

This is a beginning course in photography consisting of laboratory work and field work supplemented by lectures and demonstrations. Some of the topics covered are: the construction and operation of cameras, common films and papers, fundamental chemistry of photography, development and printing. A student needs at least one camera.

Credit: 4 semester-hours

PHYSICS 307. *Aviation*

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, motions of an airplane, stability, piloting, motorless flight, and aircraft engines. Flight experience is made available as a part of this course.

Credit: 2 semester-hours

PHYSICS 405. *Light and Optical Instruments*

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photo-electric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light.

Prerequisites: General college physics and a course in electrical measurements

Credit: 4 semester-hours

PHYSICS 406. *Astronomy*

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, the cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system.

This study is aided by the use of selected films and slides, actual sky study and field trips, the use of the sextant, octant, transit, spectroscope, sky maps, planetaria, and telescopic observations.

Prerequisites: General college physics and chemistry

Credit: 4 semester-hours

PHYSICS 407. *Aviation*

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, lift, drag, stability, motions of an airplane, piloting, motorless flight, aircraft engines, power performance, types of propellers, engine instruments, and flight instruments.

Field trips to airports and aviation industries are included. Flight experience is made available as a part of this course. Students who have taken PHYSICS 307 are not eligible to take this course.

Credit: 4 semester-hours

PHYSICS 408. *Advanced Aviation*

This course deals with the study of navigation; meteorology as applied to flight operations; radio communications; flight and navigational radio aids; instrument flight; air traffic control; jet, turbojet, and rocket flight; and recent advancements in aviation.

Prerequisite: PHYSICS 307 OR PHYSICS 407

Credit: 2 semester-hours

PHYSICS 409. *Introduction to Radio Communication*

This course deals with direct and alternating current circuits; construction and operation of detectors; characteristics of audio and radio frequency amplifiers; vacuum tubes; and comparisons of amplitude modulated and frequency modulated transmission and reception.

Prerequisite: General College Physics

Credit: 4 semester-hours

PHYSICS 410. *Meteorology*

This course is designed to develop a fuller appreciation of our atmosphere with emphasis on the meteorological applications of physical principles. Consideration is given to weather elements; the temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment.

Credit: 2 semester-hours

PHYSICS 411. *Photography*

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks, and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction.

Prerequisites: General physics and general chemistry or permission of the instructor

Credit: 4 semester-hours

PHYSICS 415. *Introduction to Modern Physics*

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radioactivity, cosmic rays, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required.

Prerequisites: General College Physics, General College Chemistry, and a course in electrical measurements

Credit: 4 semester-hours

THE DEPARTMENT OF THE SOCIAL STUDIES

The social studies teacher requires a very broad knowledge of the facts of social life, both past and present. He needs not only to know the facts, but to be able to think about them. Even more important, he must know how to impart his knowledge to younger people and to stimulate their thinking and civic interest. The secondary schools of today are rightfully expected to train for a citizenship which is alert, informed, and socially sensitive. The social studies teacher must bear a large responsibility for the accomplishment of this result.

The Social Studies Department offers a wide range of courses in the subject-matter fields aimed to provide the necessary range of knowledge. This department offers for all students, whether social studies majors or not, a course in The Development of World Civilization which presents a rapid

survey of the civilizations of the past. For all students there are, likewise, courses in Contemporary American Life.

Social studies majors are required to take courses which are at once broad and thorough in those fields which the secondary-school teacher chiefly needs. Such are the courses in European history, American history, and those courses in economics, politics, and sociology which contribute so largely to an understanding of present-day problems, both American and international.

The aim is that in each of these fields, as the subject matter is studied, there shall also be considered the problems of teaching in that particular field. But in addition to this professionalization of subject-matter, every social studies major is required to take in the senior year a specialized course in the methods of teaching the social studies.

SOCIAL STUDIES MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Mus. 100 <i>Music Appreciation</i>	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Sci. 100A/ <i>Survey of Physical Sci. or Sci. 100B Survey of Biological Science</i>	4	Sci. 100C <i>The Earth Sciences</i>	2
Soc. St. 101 <i>DEV. OF MODERN EUROPE, I</i>	4	Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
	<hr/>	Soc. St. 102 <i>DEV. OF MODERN EUROPE, II</i>	3
	16 $\frac{1}{2}$		<hr/>
			16 $\frac{1}{2}$

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Eng. 100G <i>Western World Literature</i>	3	H. Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
Soc. St. 201 <i>DEV. OF THE UNITED STATES, I</i>	3	Soc. St. 202 <i>DEV. OF THE UNITED STATES, II</i>	3
	<hr/>		<hr/>
	16 $\frac{1}{2}$		15 $\frac{1}{2}$

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Math.</i> ..	2	Math. 400 <i>Statistics</i>	2
Electives	5	Lang. 300 <i>Foundations of Language</i>	2
Soc. St. 301 <i>ECONOMICS</i>	3	Electives	3
Soc. St. 304A <i>AMERICAN GOVERNMENT, I</i>	3	Soc. St. 302 <i>FIELD STUDIES IN URBAN LIFE</i>	3
	<hr/>	Soc. St. 304B <i>AMERICAN GOVERNMENT, II</i>	3
	16		<hr/>
			16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Humanities	2	Ed. 4.. <i>Education Elective</i>	3
Electives	5	Elective—Mathematics or Science..	2
Soc. St. 401 TEACHING OF SOCIAL STUDIES IN SECONDARY SCHOOL ..	3	Soc. St. 403 SEMINAR IN SOCIAL STUDIES	2
Soc. St. AREA STUDY	3		15

16

Total: 128 semester-hours

Social studies majors are required to make at least sixty observations in the College High School, for the most part in the junior and senior years. In so far as it is possible, these observations should cover the range of high-school classes from the seventh to twelfth grades and should be so organized as to follow the development of entire teaching units.

Minors in the Field of the Social Studies

There are two minors in the field of the social studies; one in history, the other in political science and economics.

The courses in *The Development of World Civilization* (SOCIAL STUDIES 100A and 100B) may be counted for six credits toward the eighteen necessary to complete the minor in history. SOCIAL STUDIES 201 and 202 and SOCIAL STUDIES 101 and 102 must be used to complete the minor.

The courses in *Contemporary American Life* (SOCIAL STUDIES 200A and 200B) may be used for six of the eighteen credits necessary for the minor in political science and economics. The remaining twelve credits should consist of SOCIAL STUDIES 301, 303, 304A, and 304B. When it becomes possible to offer more elective courses, it is probable that other courses in the field of political science and economics will be available to those seeking a minor in that field.

THE FIRST YEAR

During the first year the social studies major, like all other students, takes a course in *The Development of World Civilization* to orient him in the field of social studies and to provide him with a background of understanding for all the social studies work of the future.

In addition, he begins his work as a social studies major by an intensive survey of European history.

SOCIAL STUDIES 100A and 100B. *The Development of World Civilization*

For a description of these courses, see page 47.

Credit: 3 semester-hours each

SOCIAL STUDIES 101 *The Development of Modern Europe, Part I*

The course deals with the differentiation in pattern of the rising national states of England and France, politically, economically, culturally, and the

contraction of the Holy Roman Empire; the period of the Reformation not only in its religious aspect but in the political, economic, intellectual, and national; the development of parliament under the Tudors and Stuarts; the rise of both Russia and Prussia as states; the French Revolution and the period of Napoleon.

Credit: 4 semester-hours

SOCIAL STUDIES 102. *The Development of Modern Europe, Part II*

This course includes a study of the main political, economic, social, intellectual, and cultural developments in Europe since the Congress of Vienna; the Industrial Revolution, the rise of liberalism, nationalism, imperialism, and democracy; the unifications of Italy and Germany. The growing factors responsible for World Wars, I and II, are discussed. The main purpose of this study is to establish an understanding of the importance of the period in relation to the modern world.

Credit: 3 semester-hours

THE SECOND YEAR

All students of the second year, social studies majors included, make a broad survey of current social, economic, and political problems. These courses carry to completion the work of the first year in *The Development of World Civilization*. Social studies majors continue their sectionalized preparedness with courses in American history.

SOCIAL STUDIES 200A and 200B. *Contemporary American Life*

For a description of these courses, see page 47.

Credit: 3 semester-hours each

SOCIAL STUDIES 201 and 202. *The Development of the United States*

This course constitutes a general survey of the development of the American nation from the period of discovery and exploration to the present. Opportunity is given to examine, analyze, and interpret the development of the main streams of American thought and action. Due consideration is given to political trends, but the year's work also treats of the economic, cultural, and social foundations of American institutions.

Credit: 3 semester-hours each

THE THIRD YEAR

In this year the student comes into his electives, both in his own field of the social studies and in the fields of his chosen minors. Courses are offered in sociology, political science, economics, history, and field studies. All of these courses are rich with materials for his teaching in the contemporary fields of history, and especially in the field of twelfth-grade American history. The courses for students majoring in the social studies are 301, 302, 304A, and 304B.

SOCIAL STUDIES 301. *Economics*

This course aims to provide the student with a detailed knowledge of the development and function of American economic institutions, the maladjustments that are apparent, and the changes that are in progress. The topics considered are: the corporation, banks, capital, industrial and agricultural production, problems of consumption, monopoly, foreign exchange, market price, and the distribution of wealth.

Credit: 3 semester-hours

SOCIAL STUDIES 302. *Field Studies in Urban Life*

This is a field-studies course in which the New York Metropolitan Area is used as the laboratory, and the social, economic, and political activities of the people of the area constitute the subject-matter. The course is designed to furnish firsthand experiences complementary to all other social studies courses, to reveal new horizons, and to train the student in field-work techniques. Studies are made of levels of living, minority groups, governmental services, economic institutions, and of the historical and geographic background of the region. There are eight field trips. To supplement the trips classroom discussions, lectures, moving pictures, and other multi-sensory aids are used.

Credit: 3 semester-hours

SOCIAL STUDIES 304A and 304B. *American Government: Local, State, and National*

This course is designed to present a picture of American government as a whole, rather than as separate compartments labeled "local," "state," and "federal." Legislation, administration, and adjudication are treated as processes which occur at all levels of government. Contrasts are drawn, however, when differences exist among local, state, and federal organization and function. Throughout the course, examples are taken from the municipal, county, and state governments of New Jersey in an effort to acquaint the student with his immediate governmental environment. This effort also tends to correct the undue emphasis ordinarily placed upon the federal government.

Credit: 3 semester-hours each

ELECTIVE**SOCIAL STUDIES 303. *The Origins and Development of the American Economy***

The general purpose of this course is to trace the history and theory of our present economic system through an examination of the original ideas, forces, institutions, and processes which have shaped its progress.

Specifically, this study describes how technology, transportation, modern credit and banking, business methods, trade unions, and monetary policies have been progressively fashioned and developed; it explains how public policy

toward agriculture, commerce, industry, investment, labor, and foreign trade has been formulated by a process of social experimentation; and, finally, it indicates the areas in which new ideas, public policy, and institutional arrangements contribute to the further progress of the American economy so that it can become a more efficient mechanism for augmenting national and international well-being.

Credit: 3 semester-hours

THE FOURTH YEAR

The work of the fourth year serves to bring to a focus the work of the preceding years, as regards both subject-matter and the teaching of it. Social studies majors during the first semester are given a systematic course in the Methods of Teaching Social Studies. They also take a course in a specific area of social studies specialization.

This preparation leads directly to actual teaching experience when, in the second semester, each major spends ten weeks in a secondary school teaching the social studies under the careful supervision of a teacher in that school and of members of the College staff.

In addition to the above mentioned required courses each senior is required to take the seminar in social studies upon return from student teaching.

SOCIAL STUDIES 401. *The Teaching of the Social Studies in Secondary Schools*

The course aims to present recent tendencies in educational method in teaching the social studies. A program is presented containing the correlation of subject-matter organization in socialized recitation, the teaching of current events, projects in citizenship, and the use of the project-problem as a method of teaching history and civics. A laboratory containing texts and workbooks in the social studies field is available to the students of this course.

Credit: 3 semester-hours

SOCIAL STUDIES 403. *Seminar in Social Studies: Basic Issues in The Social Studies*

This offering is designed for social studies majors when they return from student teaching. As its title suggests, the course is built around issues which have long been considered fundamental to an understanding of American democracy.

Credit: 2 semester-hours

ELECTIVES

The following are intended as elective courses for juniors and seniors; some of them may, under certain circumstances, be taken by sophomores with the consent of the Chairman of the Department.

Ancient and Medieval History**SOCIAL STUDIES 422. *Greek Civilization***

The aim of this course is to present the development of Greek Civilization from the earliest period to the beginning of the Christian Era. The units of emphasis are: The Migrations; Life in the Dark Ages; The Fifth Century Climax; Alexander's Era; and the civilization of the great Hellenistic centers, Alexandria and Pergamum. Consideration is also given to the Greek experiment in Federal government, the Achaean League.

Credit: 2 semester-hours

SOCIAL STUDIES 423. *Roman Civilization*

This course traces the social changes in Rome from the earliest times to the end of the Western Roman Empire. Attention is directed to the earliest features of Roman civilization and to the changes—political, social, and economic—resulting from Etruscan, Carthaginian, and Greek influences. The rise and fall of the empire are discussed with relation to their importance in medieval civilization.

Credit: 2 semester-hours

SOCIAL STUDIES 425. *Medieval Civilization*

This course covers the period from the decline of Rome to about 1500. It first emphasizes the blending of barbarian cultures with that of the Roman resulting in feudalism as a way of life. After that a study is made of the gradual evolution of towns, a trade and industrial economy on a broadening scale, the emergence of monarchical states, an intellectual awakening with the founding of universities, all of which leads finally to our modern system of national states.

Credit: 3 semester-hours

SOCIAL STUDIES 426. *Medieval History to 1498*

In the first part a study is made of the factors contributing to the political breakdown of the imperial principle, such as the growth of Christianity, barbarization of the West, and the expansion of Islam. Increasing centralization in France under the Capetians is contrasted with the rapid decentralization of the Holy Roman Empire. The growth of Feudalism and the Crusades is emphasized. The second part is devoted to the developments in Western Europe after 1200, stressing political movements, medieval commerce, guilds, growth of towns, and cultural changes.

Credit: 4 semester-hours

SOCIAL STUDIES 427. *Ancient History to 378 A.D.*

The first part of this course covers the Oriental period and the Greek through the Periclean Age. Detailed study is given the Egyptian, Babylonian,

and Hittite cultures, and Athenian democracy and imperialism. The second part covers the Hellenistic period from the rise of Philip of Macedon, stressing attempts at federalism. It also covers all periods of Roman history, placing special emphasis on republican forms and imperial experiments in governmental organization and control.

Credit: 4 semester-hours

SOCIAL STUDIES 473. *The Arts in Western Civilization*

This course is designed to show how the social, economic, political, and religious movements in Western Civilization influenced the aesthetic expression of Europe from the Golden Age of Greece to the Rise of the Industrial Revolution. Greek, Roman, Byzantine, Gothic, Baroque, and Rococo art, architecture, and music are discussed and illustrated.

Credit: 2 semester-hours

Modern European History

SOCIAL STUDIES 414. *Modern England*

This course deals both with the historical periods as such and with the influences of the political, economic, and social forces in the English literature of the century. The Napoleonic era, political reform, factory reform, the humanitarian movement, the Irish question, the ministries of Gladstone and Disraeli, and the interpretation of politics and literature are considered.

Credit: 2 semester-hours

SOCIAL STUDIES 441. *Economic History of Europe*

The study of Europe from an economic point of view is particularly important in the light of present European problems and their relation to world-wide conditions. This course is a survey of the economic life and development of Europe from the emergence of the ancient civilizations to the beginning of the modern economic world. It gives special attention to economic causes that underlie the dislocation and perplexities of the last century.

Credit: 2 semester-hours

SOCIAL STUDIES 448. *The British Dominions*

This course deals with the role Canada, Australia, New Zealand, and South Africa are playing in present world affairs. Special emphasis is given to Canada and its dual position as an American state and a part of the British Empire.

Credit: 2 semester-hours

SOCIAL STUDIES 457. *Development of Russia*

Factors which have shaped the evolution of the Russian people, such as Byzantinism and the Greek Orthodox faith, the Synod, tartar state organiza-

tion, the Mir, Westernization from Peter to Lenin, Slavophilism and dialectic materialism, are emphasized. An account is presented of Soviet internal organization, Sovkhoz, Kolkhoz, and the Five-Year plans. In addition to the historical background, Russia's great writers are discussed in the light of social and political developments.

Credit: 2 semester-hours

SOCIAL STUDIES 458. *Russia as a World Power*

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, and Stalin, is described. The changing views of the Second and Third Internationals, and the organization and methods of the Comintern are discussed. A chronological account of Soviet diplomacy, since Chicherin, is offered.

Credit: 2 semester-hours

SOCIAL STUDIES 493. *Western Europe Since World War I*

This course presents an outline of the rise of communism and facism and the reaction of western democracies to these movements. The Civil War in Spain, the Munich Pact, the failure of the League of Nations, diplomatic events of the World War II era, United Nations problems, the North Atlantic Pact, and special problems of western defense are emphasized. An evaluation of western Europe's significance for the United States is attempted.

Credit: 4 semester-hours

United States History

SOCIAL STUDIES 408. *A History of New Jersey*

This course is designed to assist teachers in acquiring a better knowledge of their state. A study is made of the history of New Jersey from the point of view of the social, political, economic, and cultural development of the people from the beginning of the settlement to the present. Special attention is given to the geographical and industrial aspects of the state, and the place of New Jersey in the national setting.

Credit: 2 semester-hours

SOCIAL STUDIES 413. *Economic History of the United States*

The great trends and movements in agriculture, finance, commerce, manufacturing, transportation, and industrial relations are traced from their beginnings in the colonial period to their contemporary expressions in the present crisis. This course supplements, but it does not duplicate, courses in the political history of the United States or courses in economic principles and problems.

Credit: 2 semester-hours

SOCIAL STUDIES 419. *American Political Biography*

This is the study of the life and influence of the leading figures in American political and social history. It is the aim here to show the relation of each of these characters to the times in which he lived and to point out how he influenced the trend of American life. The study includes such leaders as Washington, Jefferson, Hamilton, Webster, Lincoln, Cleveland, T. Roosevelt, and Wilson.

Credit: 2 semester-hours

SOCIAL STUDIES 438. *The Literature of American History*

A brief description of the material available for the study of American history is followed by class practice in finding and using the primary sources of some of the facts commonly taught in schools. Representative American historians, their training for historical study, the sources they used, the degree of accuracy with which they used their sources, their point of view, their plan of organization, and their present importance are discussed.

Credit: 2 semester-hours

SOCIAL STUDIES 447. *Diplomatic History of the United States*

The purpose of this course is to show how we have become gradually conscious of our world interests and responsibilities, and the important role we have come to play in international politics. The growing concept of world democracy as opposed to commercial and military imperialism, is stressed.

Credit: 2 semester-hours

SOCIAL STUDIES 471. *The United States Since World War I*

This course surveys the major problems, economic, social, political, and international, which have marked our national development since the end of the first World War. It is intended especially for social studies seniors as a preparation for the second year of secondary-school American history as provided for in the recently adopted state requirements.

Credit: 2 semester-hours

SOCIAL STUDIES 474. *America in Transition*

This course surveys rapidly the results of the Civil War and then emphasizes the major trends, economic and social, which have made modern America. It is intended as a more advanced study than that which is made in the undergraduate course. The period covered is from 1867 to around 1914.

Credit: 2 semester-hours

SOCIAL STUDIES 475. *The History of American Thought*

This course considers the influential thinking in America from the Mayflower Compact to the Marshall Plan to see how certain ideas or trends of

thought have grown out of situations and have in turn helped to mould the course of our history. The student should gain an appreciation for the American contribution to world culture, and an examination is made of outworn stereotypes which exist today. The writings and discourses of important American thinkers are considered including Mather, Paine, Jefferson, Emerson, Thoreau, and Veblen.

Credit: 2 semester-hours

SOCIAL STUDIES 480. *Social History of the United States*

This course presents a study of the social and cultural aspects of American history. As such, it supplements but does not take the place of economic and political history. The course considers population movements and growth, rural and urban social problems, status of women, family life, utopian ventures, mass media of communication, amusements and recreation, and human rights.

Credit: 2 semester-hours

The Americas

SOCIAL STUDIES 415. *Latin-American Relations of the United States*

This course aims to provide the information necessary to clear understanding and accurate appreciation of the political, economic, and social relations that have developed between us and our Latin-American neighbors. To achieve this end, it considers the geographical conditions, the historical events, and the civic circumstances that have motivated and directed the growth of these relations and that will determine our Latin-American policy in the future.

Credit: 2 semester-hours

SOCIAL STUDIES 435A. *The Americas: A Contemporary Political, Economic, and Cultural Survey, Part I*

This course deals specifically with the relations of the United States and the Caribbean countries. Attention is given to the dependencies of the United States in this region as well as to the independent republics. Twentieth Century political, economic, and cultural developments of this region are stressed in light of the inter-American system.

Credit: 2 semester-hours

SOCIAL STUDIES 435B. *The Americas: A Contemporary Political, Economic, and Cultural Survey, Part II*

This course deals specifically with the Twentieth Century political, economic, and cultural life of the South American nations. The role which the South American states play in world affairs is stressed. Attention is given to post-World War II developments and adjustments in South America.

Credit: 2 semester-hours

SOCIAL STUDIES 440A and 440B. *The Development of Central and South America: as Colonies and Nations*

The first part of this course surveys the period of exploration and settlement in the colonies of South and Central America. It traces the revolutionary movements that led to their independence and national development as Latin American countries. The second part studies the experiences of the various Latin American nations under different forms of government, ranging from absolute dictatorships to "popular front" administrations. It explains the economic and social standards of living accepted by the South and Central American people, and recognizes the contributions they have made to the growth of Pan-Americanism during the last century.

Credit: 2 semester-hours each

SOCIAL STUDIES 453B. *The Development of Canada*

This course is devoted to the study of the historical background, geographical environment, governmental organization, economic behavior, and social conditions of the northern neighbor of the United States. Its professional objective is to provide the understanding and appreciation necessary to the student and teacher who may follow and interpret the growth, internal and external, of the Dominion of Canada and of its relation to the United States as well as to the British Commonwealth of Nations.

Credit: 2 semester-hours

International Affairs

SOCIAL STUDIES 412. *International Government*

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international legislative, executive, administrative, and judicial problems are studied. Specifically, among the topics discussed are: the national State system, sovereignty, equality, intervention, international law, diplomatic services and procedures, international conferences and unions, sanctions, treaties, arbitration, international courts of justice, armaments and war, League of Nations, International Labor Organization, regional agreements, the United Nations.

Credit: 3 semester-hours

SOCIAL STUDIES 434. *Contemporary World Affairs*

This course is devoted to a survey of the leading diplomatic, economic, political, and military issues before the world today. The backgrounds from which these international affairs have evolved are reviewed. A study is made of the significance of these issues in the development of a program for international cooperation and peaceful living among the peoples of the world.

Credit: 2 semester-hours

SOCIAL STUDIES 442. *The Far East*

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the historical background of China and Japan, and on our relations with the Philippines. Oriental folkways, religion, education, population shifts, and strategic questions are discussed. This course provides an approach to the problems the United States must face in the Far East.

Credit: 2 semester-hours

SOCIAL STUDIES 451. *The Middle East*

This course is a survey of Indian and Moslem civilization. It shows that economic and political changes alone do not suffice to adjust the peoples of the Middle East to Twentieth-Century civilization, and that many cultural traditions, must vanish while some forgotten features of the past are to be revived. Post-war planning for the region from the Near East through Persia, India, Burma, Thailand, and Malaya to the Netherland East Indies is discussed.

Credit: 2 semester-hours

Economics**SOCIAL STUDIES 446. *Current Problems in Economics and Government***

This course is designed to analyze the relationship of economics to government. The causes and results of governmental activity are discussed in the light of their economic significance and their bearing on public welfare.

Credit: 2 semester-hours

SOCIAL STUDIES 450A and 450B. *Modern Economic Problems and Policies*

The purpose of this course is to contribute to the general need for increased knowledge in the area of economic relationship, using the problem-approach method of analysis. 450A begins with a brief recapitulation of the overall functioning of the economic system, after which the class proceeds to a detailed study of our broader economic problems and the public policies relating to them. Specifically, the problems are those relating to population and natural resources, the economic functions of government, the measurement of economic activity, monetary stability, basic banking problems, business cycles, marketing trends, economic inequality, and social security. 450B considers those problems associated with the world economy, international trade and exchange, monopoly and its regulations, the problems concerned with the control of public utilities, emergency price regulation and economic stabilization, labor problems, the problems of public finance, the public debt and fiscal policy, and finally, the nature of comparative economic systems and their relations with each other.

Credit: 4 semester-hours

SOCIAL STUDIES 456. *International Economic Relations*

The purpose of this course is to study the significance of international trade and exchange to the economic life of our nation and the world economy. An analysis of the contrasting economic philosophies relating to international economic organization is made. Special emphasis is given to those policies which tend to promote freer trade, including the classical doctrine of comparative costs, the Reciprocal Trade Agreements Act, and the International Bank and Currency Stabilization Fund.

Credit: 2 semester-hours

SOCIAL STUDIES 482. *Conservation and Rural Economic Life*

This course provides for a study of one of the basic economic problems in America today. Land use, farm loans, price support of farm products, increased acreage production, conservation practices, are among the topics studied to give the student a better understanding of the relationship between rural and urban living. Trips are arranged to nearby farms, dairy cooperatives, farm bureaus, banks, and town meetings.

Credit: 2 semester-hours

Sociology**SOCIAL STUDIES 429. *Present-Day Social Problems***

Beginning with a survey of levels of living in the United States and their relation to the distribution of wealth and income, this course proceeds with a study of poverty and crime, their sources, treatment, and prevention. Among the topics discussed are: housing, wages, unemployment, physical illness, accidents, old age, physical and mental defectiveness, the nature and extent of crime, police and prison systems, the criminal courts, and methods of punishment and reformation.

Credit: 2 semester-hours

SOCIAL STUDIES 439. *The Family and Its Problems*

This course gives a history of the family, our American family patterns, the effects of social change, marital patterns of interaction, social roles, sources of conflicts and frustrations, divorce and desertion, special problems in family life, economics of children and the home, social legislation pertaining to family problems, marital adjustments, personality change after marriage, parent-child relationships, and personality reorientation.

Credit: 2 semester-hours

SOCIAL STUDIES 443. *Youth and the Community*

This course is a sociological study of youth in its many relations to the community. Special attention is given to problems which arise in the relationship of youth and the community; e.g., juvenile delinquency, conditions

contributing to maladjustment, poorly adjusted children, and educational and social agencies active in solving youth behavior. Through the study of concrete cases, social treatment and community research are demonstrated.

Credit: 2 semester-hours

SOCIAL STUDIES 444. *The Social Bases of Human Relations*

This course emphasizes the social bases of human nature and personality. Primary and secondary groups, folkways, mores and institutions are considered. Special consideration is given to ecological and community differentials in reference to poverty, unemployment, criminality, incidence of disease, and mental derangement. Personal disorganization is studied as a process, and social forces leading to community maladjustment and social breakdown are reviewed.

Credit: 2 semester-hours

SOCIAL STUDIES 455. *Social Legislation*

This course analyzes the social, economic, and political adjustments which have come about in our society due to technological progress. The content covers such subjects as public policy relative to immigration; the problems of national income and its distribution; labor legislation; public policy to aid and protect the consumer; and an analysis of competing philosophies pertaining to industrial and social progress.

Credit: 2 semester-hours

SOCIAL STUDIES 476. *Personality Development and Group Relations*

A study is made of personality growth through social contacts, the environmental factors found in the home and family, neighborhood, play, and school groups. Methods of measuring the place of the individual in the group, analysis of the group process, ways of bringing about better life adjustment, and integrating experiences are the subject matter of the course. Concrete cases of maladjustment to society and disintegrated personality are studied. Agencies in the community which serve youth are visited, and leadership in community group activities is recognized as part of the course requirements.

Credit: 2 semester-hours

SOCIAL STUDIES 477. *Rural Sociology*

During this course the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

Credit: 2 semester-hours

SOCIAL STUDIES 479. *Education and Intercultural Relationships*

Within our nation as within the world, along with common needs and interests, there exist differences between groups and individuals which act as barriers to satisfying human relationships. This course is devoted to a consideration of these barriers and of common interests and needs which exist in spite of such barriers. We study not only the existence of such conditions but also the attitudes, principles, and techniques which may make for better human relationships.

Credit: 2 semester-hours

SOCIAL STUDIES 483. *Modern Approaches to Social Problems*

This course is designed to acquaint students with techniques and practices developed in recent years for a scientific approach to problems of human relationship. Techniques to be studied include: sampling techniques for testing large groups, questionnaires, interviewing techniques, objective observation of culture patterns, objective observation in controlled laboratory situations, sociometrics, role-playing techniques, attitude testing, and use of semantic analysis in test construction. Students become acquainted with these techniques through the study of a variety of recent reports. The selection of items to be studied depends on the needs and interests of class members. This course is designed to aid in the development of attitudes and practices which make possible the use of a modern, scientific approach to social problems.

Prerequisite: An introductory course in sociology or special permission of the instructor

Credit: 2 semester-hours

SOCIAL STUDIES 494. *Social Studies and Conservation*

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the non-renewable resources, minerals, oil, and coal. Economic, social, community, national, and individual problems are approached by giving the student firsthand experiences gained through extensive field trips in northern New Jersey. This course is of particular interest to social studies and elementary school teachers but also forms an excellent experience background for all educational fields. Methods of teaching, courses of study, and teaching units are developed.

Credit: 2 semester-hours

Political Science**SOCIAL STUDIES 430. *The Citizen and the State***

This course is designed to help any citizen become better acquainted with the many organizations by and through which our complex society manages itself. The emphasis is placed on government and political organizations, but the course also includes a study of the many other organizations of the com-

munity, the county, and the state that have to do with directing policy and maintaining controls. The aim of the course is to encourage intelligent appreciation and participation rather than simply to accumulate academic information. Consideration is also given to the ways in which such working knowledge can become a part of the experience of the pupils in our schools.

Credit: 2 semester-hours

SOCIAL STUDIES 433. *American Political Thought*

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by such men as Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

Credit: 2 semester-hours

SOCIAL STUDIES 437. *The Political Party System in the United States*

Among the topics discussed are: party organization, the political boss, the political machine, party finances, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the development of the party system, sectional politics, the farm vote, the labor vote, and the future of party government in the United States.

Credit: 2 semester-hours

Philosophy

SOCIAL STUDIES 404. *The Philosophy of History*

It is the purpose of this course to investigate the relation of history to the other social studies and also the major attempts to find the meaning of history. A brief survey is made of the leading philosophies of history.

Credit: 2 semester-hours

Educational Techniques

SOCIAL STUDIES 472. *Modern Social Studies Instruction and Supervision*

This course is designed primarily to assist teachers and supervisors to obtain a comprehensive view of recent curricular trends, current subject-matter tendencies, and newer practices in secondary-school social studies. Topics discussed include: materials, methods, and techniques; use of audio-visual aids; courses of study and experimental programs; professional literature; and problems of the critic teacher and the supervisor.

Credit: 2 semester-hours

FIELD STUDIES IN AMERICAN LIFE**SOCIAL STUDIES 460. *Central Eastern Region***

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states. Travel is by modern chartered motor coach, and overnight stops are made at first-class hotels. Among the places visited are: Valley Forge, Philadelphia, Baltimore, Annapolis, Washington, Arlington, Alexandria, Mt. Vernon, Fredericksburg, Richmond, Washington's birthplace at Wakefield, Lee's plantation at Stratford, Yorktown, Williamsburg, Jamestown, Raleigh, Chattanooga, Asheville, Great Smoky Mountains, Norris Dam, Jefferson's Monticello at Charlottesville, Natural Bridge, Skyline Drive in the Shenandoah National Park, Luray Caverns, Winchester, Harper's Ferry, Frederick, Gettysburg, and the Pennsylvania Dutch area around Lancaster and Ephrata.

Credit: 3 semester-hours

SOCIAL STUDIES 461. *New England and French Canada*

This field-study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels. The route covers the lower Connecticut Valley, including Hartford, Springfield, Northampton, and Deerfield; the Rhode Island cities of Providence and Newport; historic Massachusetts towns, such as Plymouth, Boston, Lexington, Concord, Salem, and Marblehead; the coast of New Hampshire and southern Maine; the White Mountains in the Mt. Washington and Franconia Notch area; the Canadian Province of Quebec, including the ancient French city of Quebec, Montmorency Falls, St. Anne de Beaupre, Montreal; the western shores of Lake Champlain, Lake George, and the Hudson River. It is an indispensable background for an understanding of Colonial and Revolutionary life and history in this region.

Credit: 3 semester-hours

SOCIAL STUDIES 462. *Continental United States*

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. The trip is made in a modern chartered motor coach with overnight stops at first-class hotels. The route covers about 12,500 miles and visits 26 states and 6 National Parks. Among the major points of interest are: Gettysburg, Natural Bridge, Blue Ridge and blue grass region, Mammoth Cave, Lincoln shrines in Kentucky and Illinois, Dodge

City, Royal Gorge, Pikes Peak, Denver, Rocky Mountain National Park, Taos and other Indian Reservations, Santa Fe, Petrified Forest, Painted Desert, Grand Canyon, Bryce and Zion National Parks, Hoover Dam, Los Angeles, Hollywood, San Diego, San Juan Capistrano and other Missions, Tia Juana, Santa Barbara, Sequoia and Yosemite National Parks, Monterey, San Francisco, Sacramento, Lake Tahoe, Reno, Donner Pass, mammoth redwood groves, Crater Lake, Columbia River Valley, Portland, Seattle, Mt. Rainier, Grand Coulee Dam, Spokane, Butte, Yellowstone National Park, Salt Lake City, pioneer trails of Wyoming, Black Hills, Chicago, Detroit, Toronto, and Niagara Falls. All important geographic and historical features are studied under the instruction of members of the college faculty and local specialists. Write for detailed descriptive folder.

Credit: 10 semester-hours

SOCIAL STUDIES 466. *Puerto Rico and the Virgin Islands*

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes a rather thorough exploration of San Juan and its vicinity, including the University, the rain forest and the submarine gardens, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rum producing areas, churches, homes, and historic places. One day is spent in St. Thomas largest of the Virgin Islands. The trip to and from the islands is made by air. It is usually offered during the Christmas holidays.

Credit: 2 semester-hours

SOCIAL STUDIES 467. *Florida*

This is a field-study course covering the Florida peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa; and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies. It is usually given during the Easter vacation.

Credit: 2 semester-hours

SOCIAL STUDIES 469. *Mexico*

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Overnight stops and meals are at the best hotels. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Pueblo, Oaxaca, Guadalajara, Quertero, Guanajuato, Patzcuavo, San Miguel de Allende, San Jose, Purua, Morelia, Toluca, Taxco, and Cuernavaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in the fields of geography, history, art, architecture, archaeology, sociology, economics, and other fields.

Credit: 3 semester-hours

SOCIAL STUDIES 481. *The West Indies*

This course consists of ten days of directed travel in five countries in the Caribbean region. Transportation is by air and private car with overnight stops at the best hotels. Opportunities are given for study of geographic, historic, economic, and cultural phenomena in Puerto Rico (one day), Santo Domingo (two days), Haiti (two days), Jamaica (two days), Cuba (two days), visiting San Juan, Ciudad Trujillo, San Cristobal, Port au Prince, Kenscoff, Kingston, Havana, and rural areas in all countries.

Credit: 2 semester-hours

SOCIAL STUDIES 484. *Gulf Coast and Lower Mississippi Valley*

This is a field-study course covering the Gulf Coast from Mobile to New Orleans. It also surveys the economic, geographic, and historical aspects of the lower Mississippi Valley. Some of the places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

Credit: 2 semester-hours

SOCIAL STUDIES 485. *Maritime Provinces of Canada*

This is a twenty-one day field study course covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspé. The route runs through Vermont and Quebec to the Gaspé. It covers Nova Scotia and Cape Breton Island thoroughly, including the spectacular Cabot Trail, and returns through Maine, New Hampshire, Massachusetts, and Connecticut. Among the places visited and topics studied are: Rivière du Loup; picturesque fishing villages along the River and Gulf of St. Lawrence; lumbering and pulp-wood operations; Gaspé; Percé with its bird sanctuary; Moncton, New Brunswick, with its tidal bore; St. John, New Brunswick, with its reversing falls; Truro; Digby; Grand Pré; Annapolis Royal, Lunenburg; Halifax; Sydney; Louisbourg; Cape Breton Highlands National Park. The history of the conflicts between the French and the English for this territory, the varied geographical and scenic phenomena, and the customs and daily life of the French Canadian and English-speaking people of the region are observed.

Credit: 3 semester-hours

BACKGROUND STUDIES IN AMERICAN LIFESOCIAL STUDIES 492A and B. *Studies in American Life — The East and the West*

These courses comprise a unit designed to give the student an integrated understanding of the United States as a cultural, historic, geographic, economic, social, and political unit and, at the same time, an appreciation of the regional differences which characterize American unity in diversity. It should be useful to those who have traveled, to those who intend to travel, and to

those who, although they cannot travel, wish to broaden their knowledge of our country. The geography, the history, the literature, the art, the music, the architecture, the people, the manners and customs, the flora and fauna, the economic, social, and political problems, and the significant personalities of the regions studied are discussed and illustrated with slides, films, and other audio-visual materials. Either course may be taken without the other.

The subject matter of SOCIAL STUDIES 492A covers New England, the Central East, the South, and the Middle West east of the Mississippi River. The subject matter of SOCIAL STUDIES 492B deals with the regions west of the Mississippi; i.e., the Great Plains, the Mountain States, the Southwest, the Northwest, and California.

Credit: 2 semester-hours each

INSTITUTES AND WORKSHOPS

SOCIAL STUDIES 490A. *United Nations Institute*

This course covers four and one-half hours per day for ten consecutive days excluding Saturday and Sunday. It consists of basic lectures on factual backgrounds by the instructor, supplementary lectures by visiting lecturers from the United Nations and other organizations, discussions, workshop and library projects, demonstrations of the use of audio-visual materials, and field trips to the United Nations. Included among the subjects studied are: the national state system, war and peace, world organizations (past, present, and proposed), the national armaments problem, international law, the international police proposal, pacific methods of settling international disputes, and the outlook for international cooperation.

Credit: 3 semester-hours

SOCIAL STUDIES 490B. *The United Nations and American Foreign Policy*

The purpose of this course is to help provide an understanding of the United Nations in its operation as a basis for American foreign policy. In that the Charter of the United Nations forms the backbone of American cultural, economic, and military cooperation with other nations, its interpretation and the application of our aid to needy people open a wide area of disagreement within the nation. Following the principle that American foreign policy should rest upon an intelligent understanding on the part of the electorate and working within the framework of the policy of the State Board of Education with regard to controversial issues, the United Nations Institute deals with the strong as well as the weak aspects of this newly created world organization. This Institute serves the needs of teachers of all grades, students of foreign policy, the public at large, as well as visitors from other lands who are here to study the ways of American democracy. It is available to students who have completed the requirements for SOCIAL STUDIES 490A. *United Nations Institute*, or the equivalent.

Credit: 3 semester-hours

SOCIAL STUDIES 490C. *The Specialized Agencies of the United Nations*

The purpose of this course is to give the student an opportunity to learn about the various activities of the specialized agencies of the United Nations. The course deals with the positive activities of the United Nations in the various areas of human welfare. Visiting lecturers from the agencies themselves and from areas of the world receiving such help are a regular part of the class work. Trips to the New York offices of these agencies and individual research make up the balance of the work for this course.

SOCIAL STUDIES 490A, *United Nations Institute*, or its equivalent is a prerequisite for this course.

Credit: 3 semester-hours

SOCIAL STUDIES 490D. *The United States and World Affairs*

The purpose of this course is to give the student an opportunity to make a thorough survey of the leading problems in world affairs. Visiting lecturers from agencies concerned with the problems of today's world supplement the basic information supplied by the regular members of the Institute staff. Included among the subjects studied are: Underdeveloped areas of the world, technical assistance, international trade and cultural interdependence. Special emphasis is placed on the relations of the United States with such areas of the world as the Far East, Eastern Europe, the Middle East, Western Europe, and Latin America.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to the conventional lectures, this course features the showing of the latest films in the field of world affairs, field trips to the United Nations and to foreign areas of New York, exhibits of teaching materials, demonstrations of teaching techniques and materials, folk singing, and folk dances suitable for classroom use.

Credit: 3 semester-hours

SOCIAL STUDIES 490E. *Latin America, a Survey*

The purpose of this course is to give the student an opportunity to make a thorough survey of Latin America. Visiting lecturers from agencies concerned with Latin American affairs supplement the basic information supplied by the regular members of the Institute staff. Included among the subjects studied are: Geographic setting and influences, pre-European cultures, exploration and settlement, independence, the Monroe Doctrine, economic colonialism, Pan-Americanism, present-day Latin America, United States relations with Latin America, and Latin America and the United Nations.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to conventional lectures, this course features the showing of the latest films on Latin America, field trips to the

United Nations and Latin American centers of New York, exhibits of materials suitable for teaching, demonstrations of teaching techniques and materials, folk singing, and folk dances suitable for classroom use.

Credit: 3 semester-hours

SOCIAL STUDIES 490F. *Russia in the Modern World*

The purpose of this course is to give the students an opportunity to study the development of modern Russia and the impact of its emergence as a world power. Particular attention is devoted to the role played by the geographical and historical forces that influenced Soviet foreign policy. The course meets three hours a day for each of fifteen days. Visiting lecturers from agencies concerned with Russian affairs supplement the basic information supplied by the regular members of the Institute staff. Included among the topics studied are: The nature and source of Soviet power, land and people of the Soviet Union, the role of the Communist Party, United States relations with Russia, Russia in the United Nations, Russian interest in the Far East and the Middle East, and the Cold War.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to conventional lectures, this course features the showing of the latest films on the Soviet Union, field trips to New York City, exhibits of materials suitable for classroom use and demonstrations of teaching techniques.

Credit: 3 semester-hours

SOCIAL STUDIES 490G. *Western Europe at Mid-Century*

The free nations of Western Europe are examined for their influence upon world affairs as well as for the ways in which they are affected by developments on the international scene. They are studied as the point of East-West contact and as a center of East-West rivalry. Particular attention is paid to the changing status of Western European powers and to the geographical, economic, and historical forces which are bringing about this change. Included among the areas studied are: political and governmental institutions; geographic influences; intra-European cooperation; economic bases of politics and history; pertinent historical trends and developments; social and intellectual developments; and, the role of tradition and provincialism. Among the nations considered are: the United Kingdom, France, the Benelux countries, West Germany, the Scandinavian countries, Italy, Portugal, Spain, and Ireland.

This course is designed primarily for teachers who feel the need for up-to-date background information and improved teaching materials and techniques for use in their classes. All teachers interested in world affairs are given the opportunity to build up a personal background of information and understanding. Background lectures, small study groups, field trips to New York City, films and exhibits of materials suitable for classroom use are

included in the program. Spokesmen for the various national points of view supplement the basic information presented by the regular members of the Institute staff.

Credit: 3 semester-hours

SOCIAL STUDIES 491A. *Workshop in Citizenship Education, Part I*

The purpose of this workshop is to present a study of what has been done in some of the many projects in citizenship education throughout the country. Special emphasis is placed on the plans and materials developed by the Citizenship Education Project now being conducted by Teachers College, Columbia University, and financed by the Carnegie Corporation. Montclair has been one of the eight colleges cooperating in this project, and the College High School is now a co-operating school. Consultants are invited in as needed. Attention is given to programs and practices already in use in the schools, and advantage is taken of the state-wide project in collecting from the schools experiences in education for character and citizenship. New means for citizenship education are sought and methods of evaluation are reviewed. Experience in the group processes essential to democratic action is provided. Each participant in the workshop works on actual plans for carrying out such education in the school and the classroom.

Credit: 2 semester-hours

SOCIAL STUDIES 491B. *Workshop in Citizenship Education, Part II*

Membership in this workshop course is limited to those who have completed SOCIAL STUDIES 491A, and participants in this advanced workshop meet and work with members of the SOCIAL STUDIES 491A workshop. On the basis of previous experience, each member of the SOCIAL STUDIES 491B group is expected to work out several laboratory practices or similar projects for use in the classroom or the school.

Credit: 2 semester-hours

SOCIAL STUDIES 499. *Introduction to Chinese Culture*

A number of authorities introduce first-year students to the rise, growth, and maturing of Chinese civilization, as well as to the fundamental problems of China today, including the conflict of ideologies. The course is given in twelve days. Each day there are two hours of lectures in the morning; after lunch a period of forty-five minutes is devoted to informal talks including further discussion on Chinese music, philosophy, Chinese school days, festivals, and calligraphy. Some time is also given to the singing of Chinese songs and the showing of motion pictures. During the two-hour workshop period the students prepare their projects, teaching units, and background material under the direction of faculty members.

Credit: 3 semester-hours

SOCIAL STUDIES 496A. *The Chinese Society*

This course is an intensive study of the formation of the Chinese people, their collective life, and the interaction of natural and human forces with the resultant social organizations from early times to the present. Particular emphasis is placed upon the development of social institutions, including the family, labor guilds, educational systems, and religious institutions, as well as their transformation and modernization under the impact of different forces from the West. There are twenty-four hours of lectures in the morning, and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

SOCIAL STUDIES 496B. *China: The Evolution of a Nation*

This course is an intensive study of the Chinese civilization, the forces underlying the development of the national character of the Chinese people, their contacts and conflicts with other peoples and cultures from historical times to the present. Because of its voluminous material, this course does not attempt to cover the whole span of Chinese history, but it is an integrated presentation of the maturing of the Chinese people as a nation. There are twenty-four hours of lectures in the morning, and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

SOCIAL STUDIES 497. *Chinese Philosophy*

This course shows how the ancient philosophies, Confucianism, Taoism, Buddhism, Mohism, can be applied to the China of today and how they affect modern Chinese thought. There are twenty-four hours of lectures in the morning and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*, or equivalent course in philosophy

Credit: 3 semester-hours

SOCIAL STUDIES 498. *China and the Far East*

This course presents to the student a factual and up-to-date analysis of the forces that are operating in the Far East and shows how these forces may affect future developments in this critical area of the world. China, with its people as a key area in the Far East, is interpreted in terms of current economic, political, and cultural developments. Recognized experts from the various countries in the Far East present problems from the standpoint of their experience and background. The course itself is synthesized by a course director who is a serious student of China and its neighbors.

Credit: 3 semester-hours

FINE ARTS 414. *History of Chinese Art*

For a description of this course, see page 99.

Credit: 3 semester-hours

ENGLISH 459. *A Survey of Great Chinese Literature*

For a description of this course, see page 86.

Credit: 3 semester-hours

THE DEPARTMENT OF GEOGRAPHY

Geography is a science. On a scientific basis it deals with places and their chief attributes, the topography, the rocks and minerals, the climate, the natural vegetation and animal life, the soils, and increasingly with the role of man, his culture, his works, his relationship to the earth.

As a consequence, geography occupies a unique place among the natural and social sciences. It examines man in the totality of his physical-cultural milieu and brings the thought, techniques, and tools of these disciplines to bear on a particular problem or area.

Why is present-day Pittsburgh the center of a mighty iron and steel empire? Where does the iron ore come from? What role did the Allegheny and Monongahela rivers play in Pittsburgh's early development? What is Connellsville coke? And on the basis of what we know can we predict Pittsburgh's future?

Geography is *everywhere*. Therefore, geography's viewpoint is global. Pittsburgh, London, Timbuktu, Peiping, Vladivostok, Chuquicamata. Where? When? Why?

The geographer of today must be a trained observer of the physical aspects of our environment as well as an astute student of the social sciences. Therefore, the program for this Department stresses sound training in fundamental physical geography, in the principles of cultural geography, and in analysis of the geographic area.

Courses are arranged in sequence to provide students with an orderly and progressive road to the mastery of geographical techniques, tools, and methods. Major emphasis is placed upon the detailed study of maps and in experiences in the field.

The Department of Geography attempts not only to prepare teachers of geography for the junior and senior high schools, but also to: (1) contribute to the preparation of teachers of science and other subjects; (2) provide fundamental courses for the student of history, economics, and related subjects; (3) furnish a basis of study for enjoyment of recreation and travel; and (4) afford, as a part of general education, a broad cultural background for the understanding of our times.

General Education Courses

SCIENCE 100C, *The Earth Sciences*, is required of all students. One of the following courses is accepted as an alternative for fulfilling this requirement: GEOGRAPHY 100, *Human Geography*, and GEOGRAPHY 101, *Principles of Geography*.

The Geography Minor

The following course requirements constitute the geography minor:

SOPHOMORE YEAR

<i>Semester I</i>	<i>SH</i>	<i>Semester II</i>	<i>SH</i>
Geog. 201 <i>Climatology</i>	3	Geog. 204 <i>Soils, Natural Vegetation, and Land Utilization</i>	3

JUNIOR YEAR

<i>Two of the following:</i>	Geog. 302 <i>Economic Geography</i> ...	3
Geog. 202 <i>Regional Geography of Anglo-America</i>	3	
Geog. 304 <i>Geography of Europe</i> ..	3	
Geog. 305 <i>Geography of Asia</i>	3	

SENIOR YEAR

<i>One of the following:</i>	
Geog. 421 <i>Population Problems of the World</i>	3
Geog. 419 <i>Geography of the Soviet Union</i>	3

THE FIRST YEAR

The work of the first year in geography aims through a study of geographic principles to give the student an accurate conception of the subject as a field of scientific thought; to give an appreciation of the importance of geography in education; to serve as a unit of general culture; and to establish fundamental concepts of the subject that will be of value for further study of geography.

SCIENCE 100C. *The Earth Sciences*

For a description of this course, see page 50.

Credit: 2 semester-hours

GEOGRAPHY 100. *Human Geography*

The course introduces the student to the disciplines of geography and anthropology. It is primarily concerned with people and with the adjustments they make to their environment both physical and cultural. Three cultures are critically examined: the Indians of the Plains, the Cotton South, the American Manufacturing Belt. Geographical environment, the economy, social organizations, and culture changes are stressed in each culture.

Credit: 2 semester-hours

GEOGRAPHY 101. *Principles of Geography*

This course is designed to introduce the student to the science of geography. It is based upon a world-wide survey of the physical and cultural elements of the geographic environment. Emphasis is placed upon the adjustments that man makes to that environment, the challenges that it offers, and the responses that are made. Much effort is devoted to the study of maps and their uses.

Credit: 2 semester-hours

GEOGRAPHY 103. *Introduction to Cultural Anthropology*

This course introduces the student to work in anthropology. It is concerned primarily with man and his works. Human origins and prehistoric cultures are viewed against the earth background. The concepts of race and culture are examined and defined; the material and non-material traits of primitive societies are analyzed critically; the regional approach is stressed; and emphasis is placed on the delimitation of culture areas. The course provides the fundamentals necessary for future work in cultural geography and anthropology.

Credit: 3 semester-hours

THE SECOND YEAR

The courses for the sophomore year are arranged to give the students a thorough grounding in the physical background of the subject, and a development of geographic thinking that will aid them in clear reasoning and expression in working out the relationships of man to his natural environment.

GEOGRAPHY 201. *Climatology*

This course is divided into two sections: meteorology and climatology. Section one stresses the basic weather elements — temperature, pressure, precipitation, atmospheric circulation, storms. Aspects of weather forecasting are discussed, and weather maps are studied. Section two introduces the student to the major climatic subdivisions of the earth. These are analyzed in detail. Variations in climatic types are emphasized. In both sections use of instruments, adiabatic charts, map interpretation, and competence in the use of climatic classification systems are stressed where necessary.

Credit: 3 semester-hours

GEOGRAPHY 204. *Soils, Natural Vegetation, and Land Utilization*

This course is designed to introduce students to the edaphic and floral factors in geographical analysis. World-wide distribution patterns are established for each. Their significance to man and man's utilization of them are assessed critically.

Credit: 3 semester-hours

ELECTIVES**GEOGRAPHY 203. *Physiography of North America***

This course is designed to review basic principles of geomorphology, examine critically the regional approach in the earth sciences, and describe and delineate the physiographic regions of North America. Aspects of climate, soil, flora, and fauna are also treated as bases for regional classification. Topographic map interpretation is stressed. The course provides the physical base for future cultural studies of the continent.

Credit: 3 semester-hours

GEOGRAPHY 205. *Economic Life of Primitive Peoples*

This course introduces the student to the intimate relationships that exist between geography, anthropology, and economics. Cultures are examined against the earth's background. Gathering, hunting, fishing, herding, and agricultural cultures are analyzed critically. Particular attention is paid to the domestication of plants and animals and the economic lifeway of specific peoples.

Credit: 3 semester-hours

THE THIRD AND FOURTH YEARS

In the work for the junior and senior years there is emphasis upon the subject-matter in regional and economic geography necessary for teaching geography in the secondary schools. Also more attention is given to the professionalization of the subject-matter than in either of the previous years; that is, the techniques of presenting material, the use of geographical tools, and the problems of testing are dealt with in the treatment of the subject-matter in hand.

GEOGRAPHY 202. *Regional Geography of Anglo-America*

This course is designed as a regional analysis of Canada, Alaska, and the United States. It serves as an introduction to and a desirable foundation for the study of other continental areas. Emphasis is placed upon the human activities in relation to their natural environment. The student is introduced to the physiographic, climatic, edaphic, and vegetative patterns of regions as well as the cultural and ecological factors. Anglo-America's place in the world economy is analyzed critically.

Credit: 3 semester-hours

GEOGRAPHY 302. *Economic Geography*

This course is designed to introduce students to the basic principles of economic geography. Special emphasis is placed upon the development of agricultural and industrial societies. The importance of the world's food

resources, the fossil fuels, the iron and steel industry, the location of industry, transportation, and trade are all stressed. All are viewed and interpreted in terms of the geographic environment.

Credit: 3 semester-hours

GEOGRAPHY 304. *Geography of Europe*

This course is designed as a regional analysis of Europe. It examines critically the physical and human aspects of the continent's geography. Relations between the European state are discussed, and Europe's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 305. *Geography of Asia*

This course is designed as a regional analysis of Asia. It examines critically the physical and human aspects of the continent's geography. Relations between the Asiatic states are discussed, and Asia's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 419. *Geography of the Soviet Union*

This course is designed as a regional analysis of the Soviet Union. It examines critically the physical and human aspects of Soviet geography. Particular emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 421. *Population Problems of the World*

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

Credit: 3 semester-hours

OTHER COURSES IN GEOGRAPHY

GEOGRAPHY 303. *Regional Commercial Geography of the Americas*

This course comprises a regional study of the physical geographic factors which contribute to the production, distribution, and marketing of the resources of the western hemisphere. The location of trade routes and commerce centers in relation to the physical features of the earth's surface is considered. Emphasis is placed on the main industries resulting from the utilization of the natural resources, on the recent trends and shift of industries, and the world position of the nations of the Americas in the production and exchange of commodities.

Credit: 3 semester-hours

GEOGRAPHY 306. *Geography of Latin America*

This course is designed as a regional analysis of Latin America. It examines critically the physical and human aspects of the continent's geography. Relations between the Latin American states are discussed as are relations with the United States. Latin America's place in the world economy is also analyzed.

Credit: 3 semester-hours

GEOGRAPHY 307. *Cartography*

This is the basic course in cartography. Students master the use of cartographic instruments and attempt to understand the principles underlying the common types of map projections. Map interpretation and map usage and construction are emphasized. This course meets for one lecture hour and two laboratory hours.

Credit: 2 semester-hours

GEOGRAPHY 405. *Urban Geography*

The student is introduced to the complex forces that have been and are responsible for the intense concentration of political, social, and economic activities within a small area. This area is then analyzed from the point of view of its evolution, morphology, and function. The changing characteristics of our cities, suburbanization, city-service areas, and city-hinterland interrelationships are also investigated. Special emphasis is placed upon research methods and source materials.

Credit: 3 semester-hours

GEOGRAPHY 406. *Geology*

This course deals with the earth and its geographic, stratigraphic, and structural development throughout geologic time; the record of the evolution of life as interpreted through a study of rocks and fossils.

Credit: 2 semester-hours

GEOGRAPHY 408A and 408B. *Political Geography*

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustment between nations.

Credit: 2 semester-hours each

GEOGRAPHY 409. *Economic Geography of the British Isles*

A comprehensive treatment of the resources of the British Isles is given, and the influence of the natural environment upon the utilization of those resources in the economic, social, and political development of the British Empire is evaluated.

Credit: 2 semester-hours

GEOGRAPHY 410. *Economic Geography of Carribbean America*

This is a study and interpretation of the major and important minor economic areas of Caribbean America in relation to the natural environment. Attention is also given to the historical factors which have played a part in the economic and social life of the people.

Credit: 2 semester-hours

GEOGRAPHY 411. *Historical Geography of the United States*

This course provides an opportunity for students of history, geography, and related disciplines to become familiar with the major principles of historical geography. It emphasizes the geographic factors pertinent to an understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Particular attention is paid to source materials, to the cartography of specific times, and to geographical lore and thought.

Credit: 3 semester-hours

GEOGRAPHY 412. *Geography of Africa*

This course includes a topical and regional study of Africa. Special emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined critically in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

Credit: 3 semester-hours

GEOGRAPHY 413. *Economic Geography of South America*

This course constitutes a study of the influence of the natural environment upon production and utilization of resources in the economic, social, and political development of the various nations of South America.

Credit: 2 semester-hours

GEOGRAPHY 414A and 414B. *Advanced Economic Geography*

This course is a study of the influence of the physical environment upon the production of, the trade in, and the utilization of the important agricultural, forest, mineral, and sea products, and the manufactured commodities of the world.

Credit: 2 semester-hours each

GEOGRAPHY 416. *Conservation of Natural Resources*

This course provides an opportunity for students of the social and physical sciences to study the natural resources of the United States. Exploitation and conservation are both stressed. Our major resources are reviewed in terms

of use, needs, and future developments. Consideration is given to the growth of legal and social awareness of the need for conservation practices in America.

Credit: 3 semester-hours

GEOGRAPHY 418. *Regional Geography of North America*

This course constitutes a detailed regional treatment of the continent of North America. Emphasis is placed upon the human activities of the various regions in relation to their natural environment and the relations of the regions to each other. Attention is given to the techniques of presenting the material and the use of geographic tools in the treatment of the subject-matter.

Credit: 2 semester-hours

GEOGRAPHY 420. *Field Geography and Conservation*

This course constitutes a study of the relation between relief features of northern New Jersey, the location of natural resources, and the way in which land use and population distribution follow these patterns. Emphasis is given to the reading and interpretation of topographical maps and aerial photographs and to a study of the United States Geological and Soil Surveys of this region. By means of an actual land-use survey the student comes to appreciate the problems of conservation as they grow out of man's use of natural resources.

Credit: 2 semester-hours

GEOGRAPHY 422. *Geography of the American Indian*

This course is designed to survey the culture of the American Indian (from the Ice Age to the Reservation) in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet for the first time, and culminates with discussion of the Indian problems of the present day. It serves to introduce the student to methods employed in interdisciplinary attacks upon cultural problems. The views of the geologist, archaeologist, cultural anthropologist, cultural historian, as well as the geographer are critically examined.

Credit: 3 semester-hours

GEOGRAPHY 423. *The Geography of Transportation*

An intensive examination of the principles of transportation geography is provided. The different methods of transportation are studied systematically with regard to their development and present-day role in regional development. The growth of international specialization and the resulting economic development are also considered.

Credit: 3 semester-hours

GEOGRAPHY 424. *Geography of New Jersey*

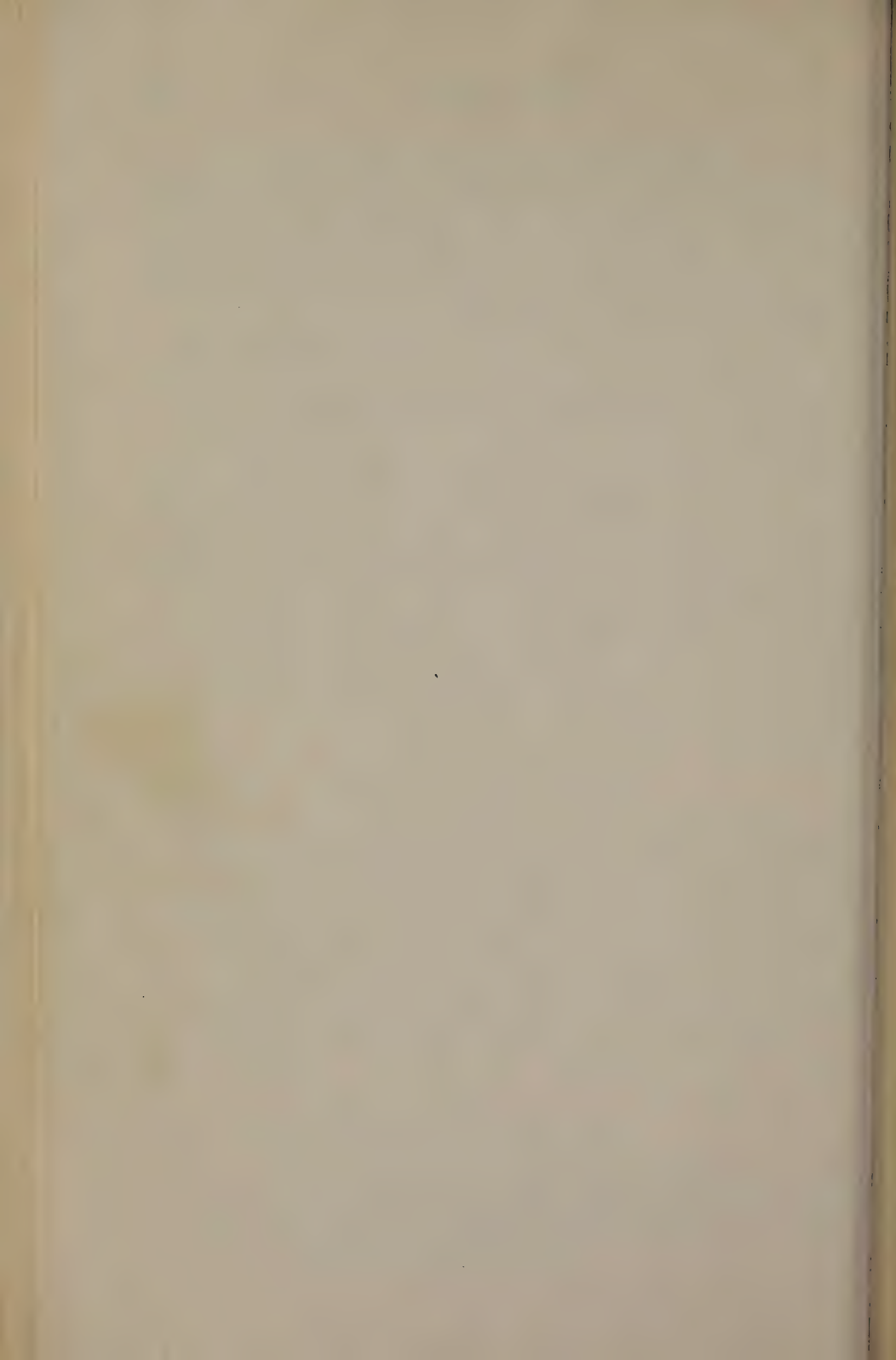
This course is a detailed topical and regional study of New Jersey. Physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relations with neighboring states are intensively studied. On the basis of the data thus examined an attempt is made to delineate the geographic regions of the state. Emphasis is placed throughout on the relationship between New Jersey's people and New Jersey's earth.

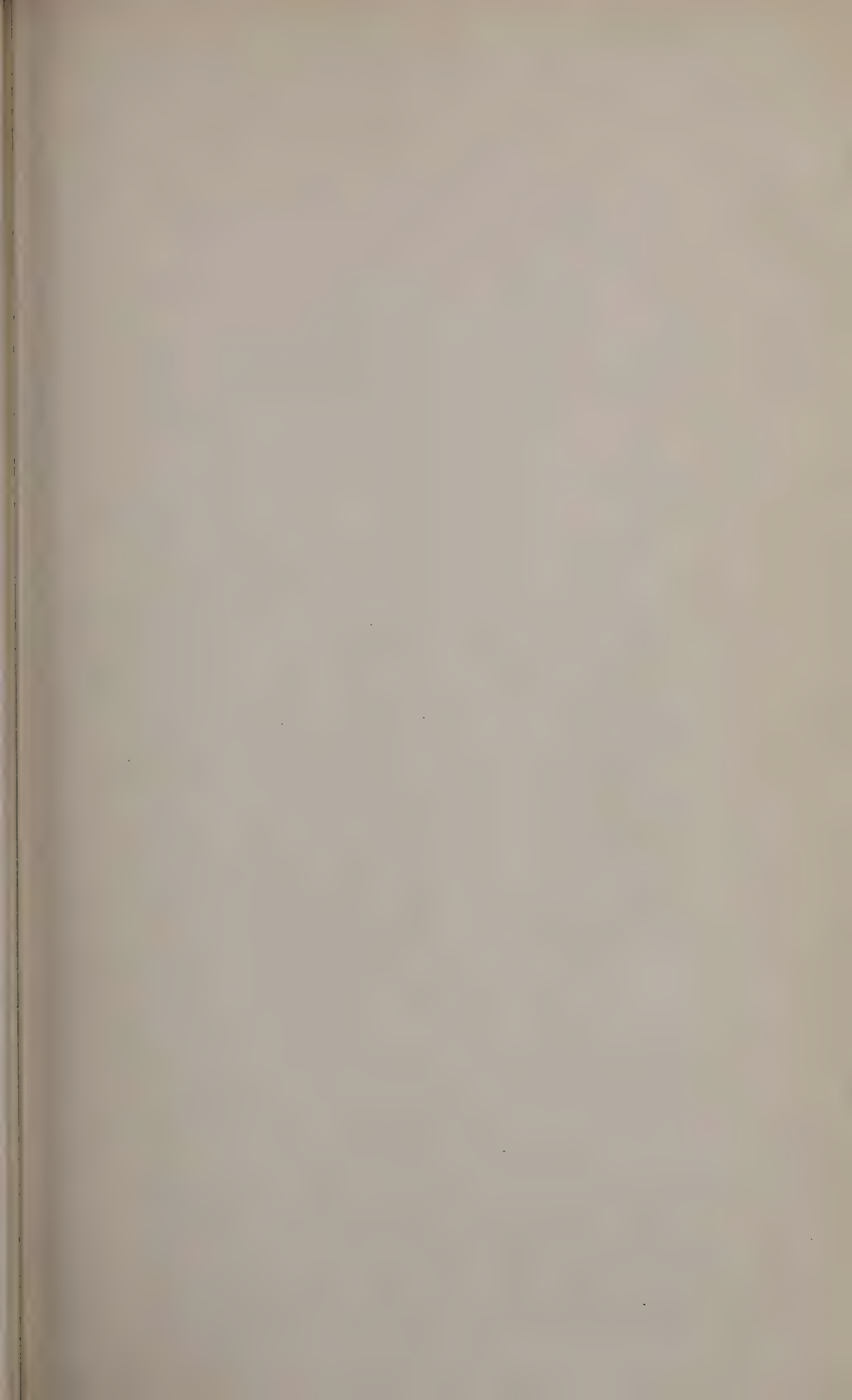
Credit: 3 semester-hours

GEOGRAPHY 425. *Geography of Exploration and Settlement*

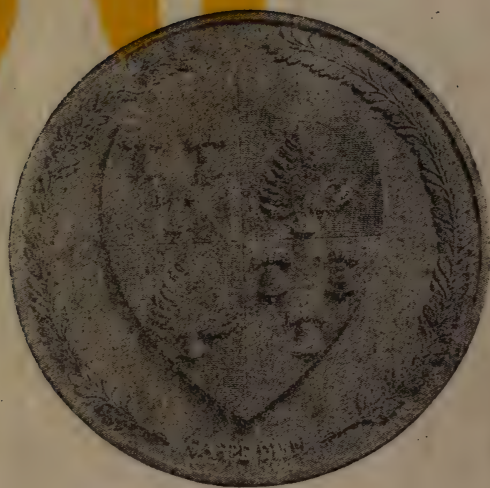
This course is designed to survey the great age of exploration and settlement (1500-1900) of lands overseas inaugurated by the Columbian voyages. Its major themes are: knowledge concerning the lands of the earth, the unfolding of the world map, the type settlements erected by Europeans in distant lands. Special attention is given to motives for exploration, methods of navigation and travel, routes explored, and the cultural features marking European settlement.

Credit: 3 semester-hours





50th



anniversary

MONTCLAIR

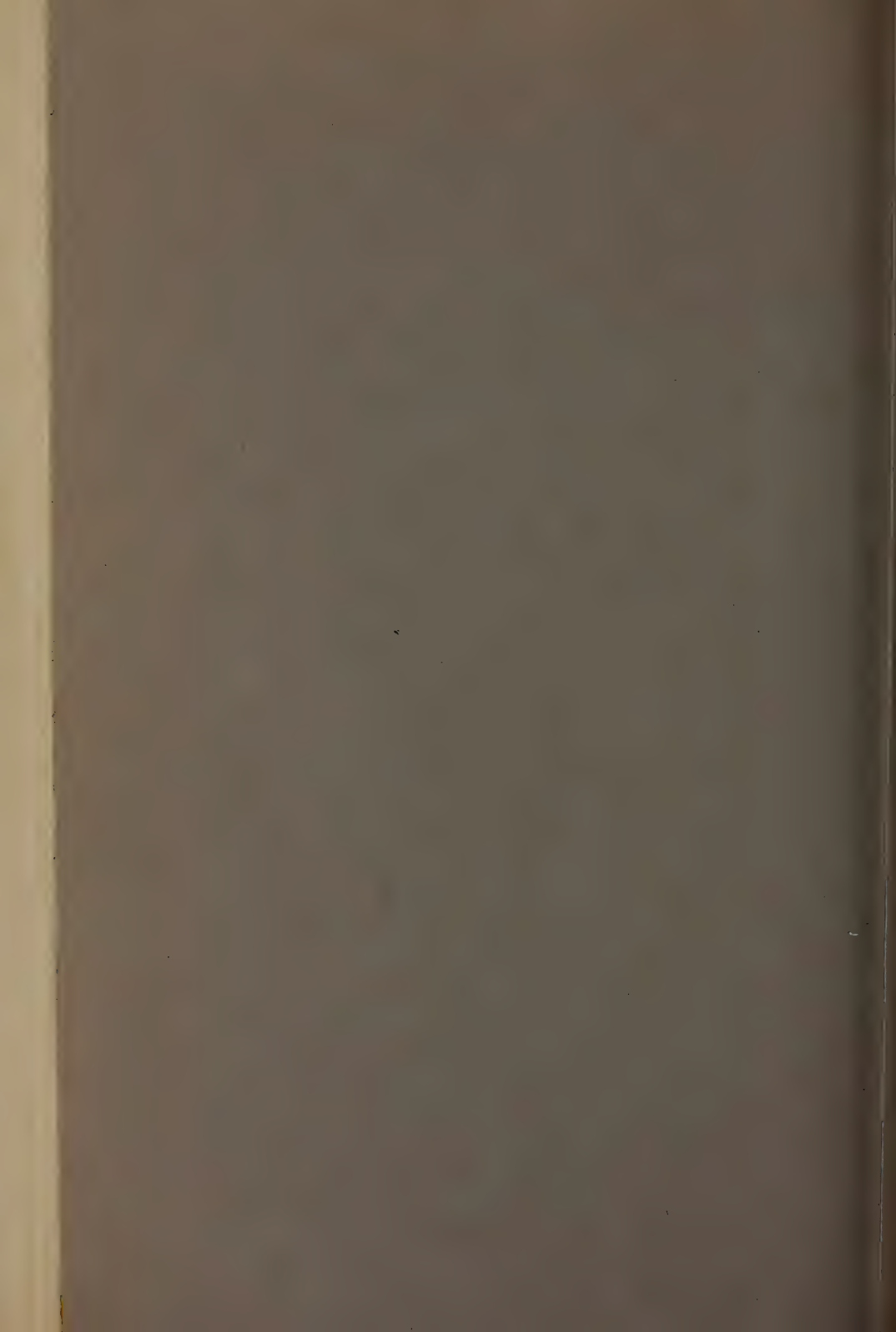
Andrew Russell

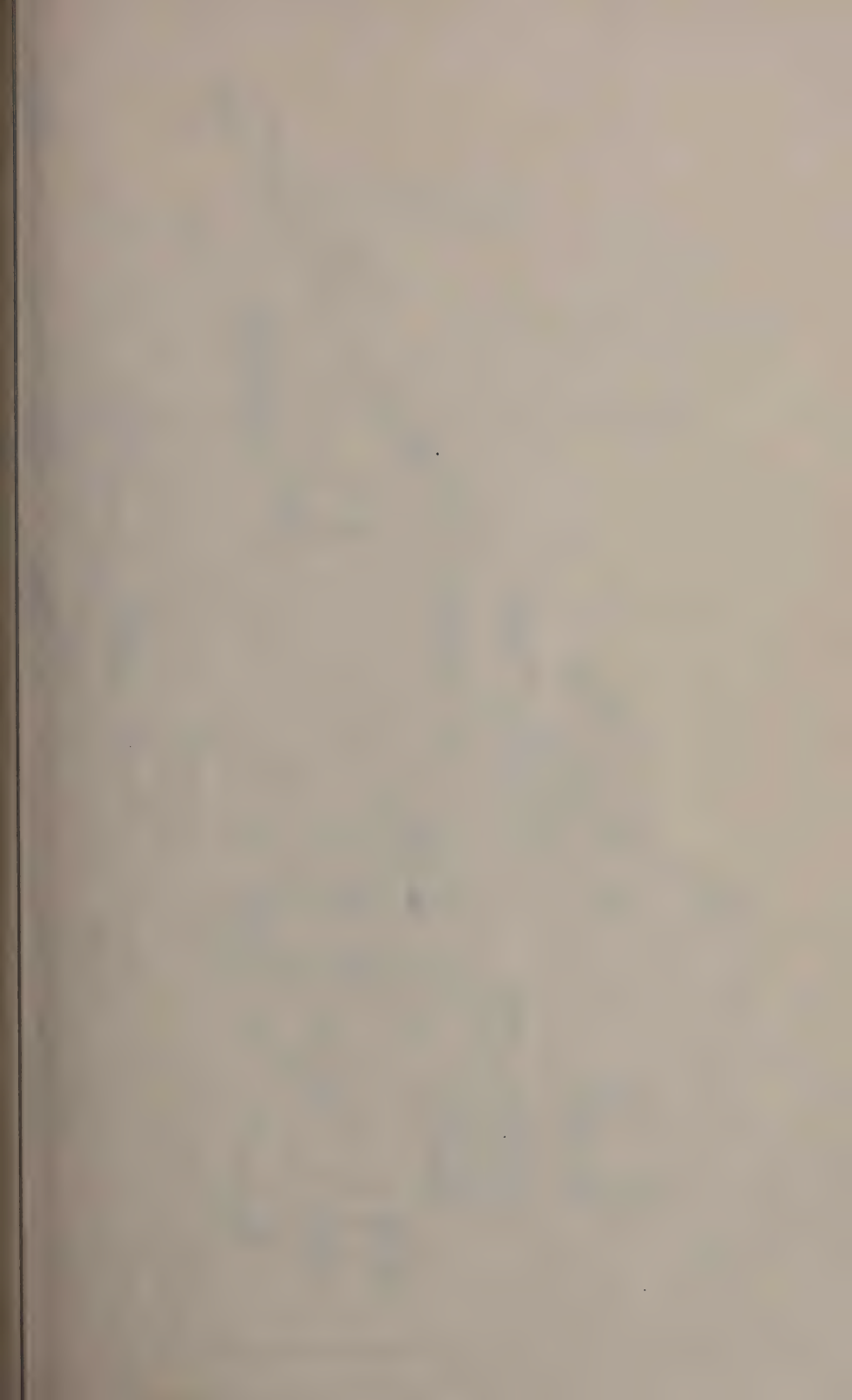
MONTCLAIR
STATE COLLEGE

GRADUATE BULLETIN
1959-1961



UPPER MONTCLAIR, NEW JERSEY





MONTCLAIR STATE COLLEGE



BULLETIN

OF

Montclair State College

GRADUATE DIVISION

MONTCLAIR STATE COLLEGE

Upper Montclair

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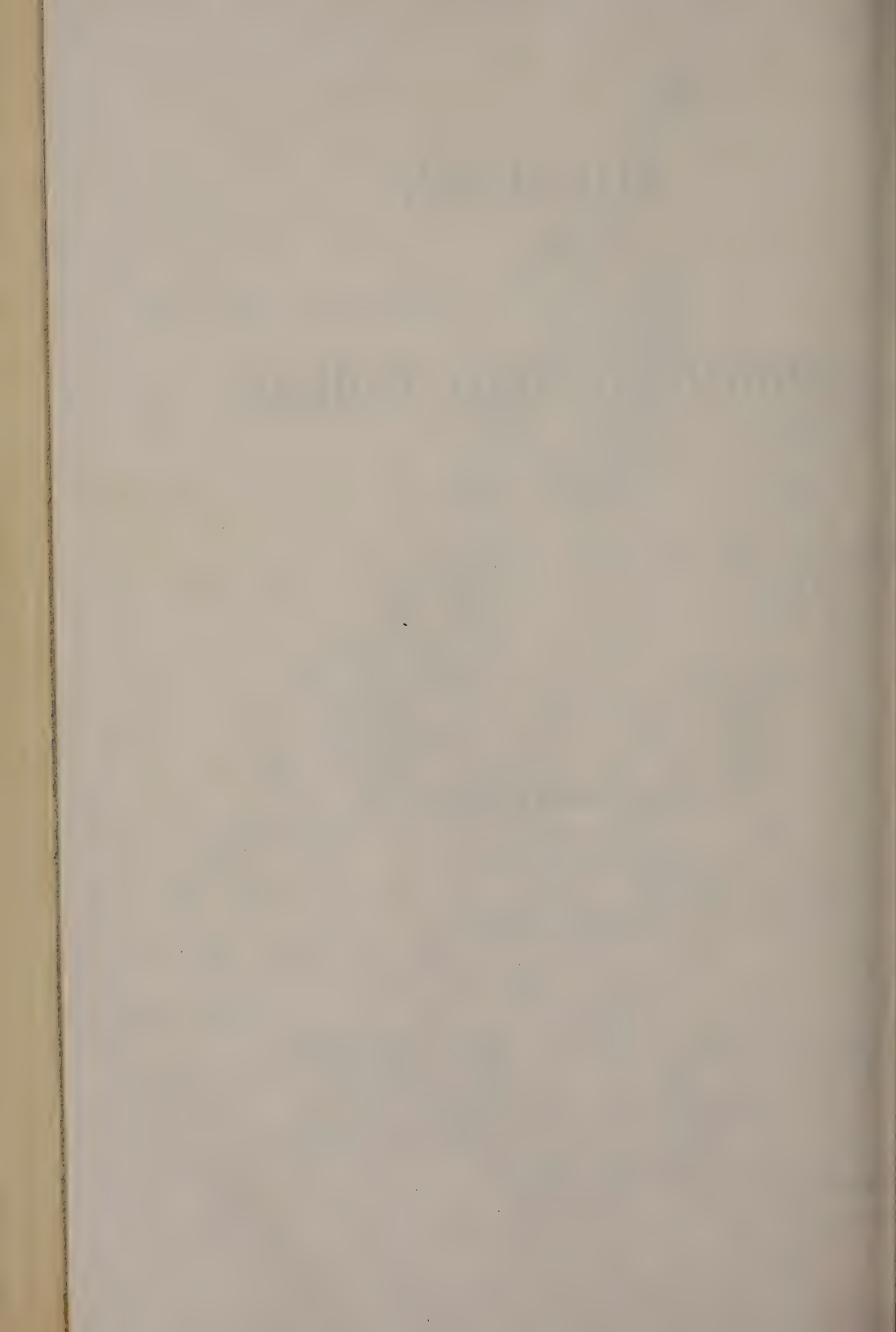


TABLE OF CONTENTS

	<i>Page</i>
Officers of Administration	5
Graduate Faculty	6
GENERAL INFORMATION	9
History	9
Location	9
Library	10
Living Accommodations	10
Administration	10
Purposes	11
Organization	11
Certification	12
Admission and Matriculation	13
Transfer Credits	14
Student Load	15
Requirements for A. M. Degree	15
Application for Conferment of Degree	16
General Restrictions	17
Fees and Service Charges	17
The Master's Thesis and Research	18
Fields of Work	19
DEPARTMENT OF BUSINESS EDUCATION	21
DEPARTMENT OF EDUCATION	31
DEPARTMENT OF ENGLISH	51
DEPARTMENT OF FOREIGN LANGUAGES	64
DEPARTMENT OF INDUSTRIAL ARTS EDUCATION	65
DEPARTMENT OF MATHEMATICS	72
DEPARTMENT OF SCIENCE	84
DEPARTMENT OF SOCIAL STUDIES	102
DEPARTMENT OF SPEECH	128
OTHER COURSES THAT MAY BE USED AS	
ELECTIVES	140
Fine Arts	140
Geography	143
Music	148
Health Education	153
Physical Education	154
New Jersey State School of Conservation	156

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ABRAHAM GELFOND, Ph.D.

Supervisor of Guidance, Linden Public Schools

HAROLD F. HOFFMAN, Ed.D. Superintendent of Schools, Livingston

CHARLES T. LETSON, E.D.D.

Reading Consultant, Montclair Public Schools

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Vice-Principal, Bloomfield Junior High School

HARRY M. RICE, A.M. Principal, Bloomfield Senior High School

ADRIAN STRUYK, A.M.

Head of Mathematics Department, Clifton High School

LAURA M. TREXLER, E.D.M.

Guidance Director, Northern Valley Regional High School

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EDITH G. H. LENEL, PH.D.Library Cataloger

CLAIRE M. MERLEHAN, A.M.Reference Librarian

EMMA FANTONE, A.M.Audio-Visual Education

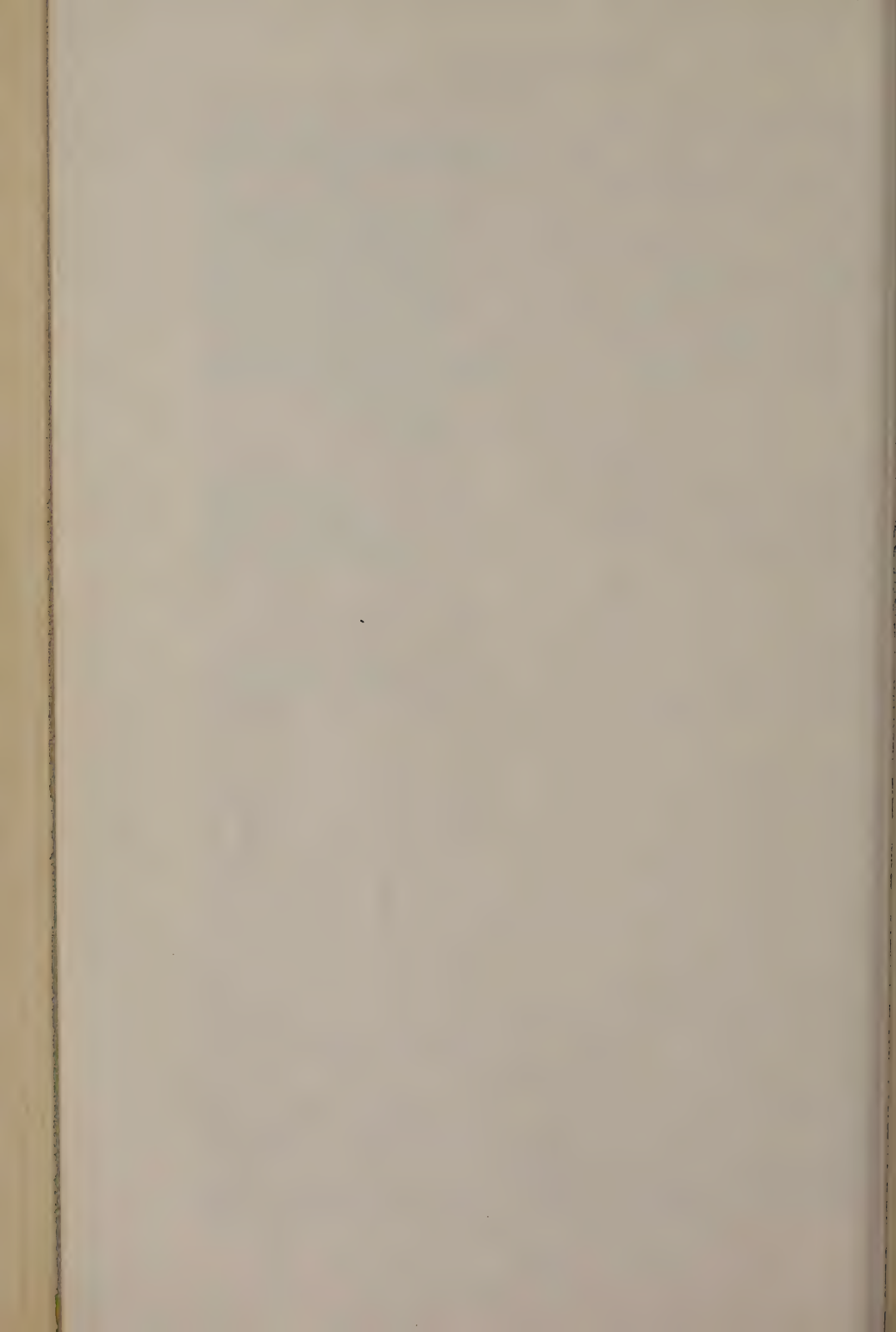
THADDEUS J. SHEFT, A.M.Audio-Visual Education

SECRETARIAL STAFF

ROSE METZSecretary, Summer, Part-Time and Extension
Division and Graduate Division

JACQUELYN E. BLACK

Secretary, Summer, Part-Time and Extension Division



GENERAL INFORMATION

HISTORY

In 1908 Montclair State College first begun its teacher-education program as a two-year Normal School. In 1927, by act of the State Board of Education, it was changed to a State Teachers College with four-year curricula leading to a Bachelor of Arts degree and certification to teach in the secondary schools of the State. That the College might better serve teachers in service, extension courses were instituted in 1929 and summer sessions in 1930. The fact that hundreds of teachers in service registered in these programs annually shows the wisdom of the State Department in instituting them. The majority of these teachers held A.B. degrees, and they wished to continue their preparation and receive graduate credit for their work. They, therefore, requested that the College offer courses for graduate credit.

To meet this demand, the Commissioner of Education recommended and the State Board of Education voted in June, 1932, that such work be offered and the College be empowered to grant the degree of Master of Arts. Graduate courses were first offered at the State Teachers College at Montclair in the summer of 1932 and have been offered in all regular and summer sessions since.

In 1948 the Graduate Committee was formed as a sub-committee of the Administrative Council to develop programs and standards for graduate work. Since 1956 this committee has assumed greater responsibility for the conduct of the graduate program with its title changed to Graduate Council. On July 1, 1958, the title of the College was changed to Montclair State College by action of the State Board of Education.

Currently there are 1,600 students registered in the Graduate Division's various courses with approximately 700 students matriculated for the Master's degree.

LOCATION

Situated on the northern boundary of Upper Montclair, the College is approximately three miles north of the center of the town of Montclair and twelve miles east of New York City. The main entrance is at the intersection of Valley Road and Normal Avenue. Public transportation is available on the Greenwood Lake Division of the Erie Railroad and on Public Service bus routes (Nos. 60, 64, and 76 connect with the Lackawanna Railroad in the town of Montclair). Other bus lines serve the campus from New York, Newark, the Oranges, and Paterson. The junction of Highways Nos. 46 and 3 is located about one mile north of the campus. The Garden State Parkway connects with these highways close to the College.

LIBRARY

Conveniently located on the main floor of College Hall is the College Library of 83,000 volumes, with two large reading and reference rooms and three smaller reading rooms housing the music collection and the Curriculum Laboratory and Textbook Exhibit. The Textbook Exhibit of over 5,000 volumes includes the most recent textbooks in all subjects on both the elementary and secondary levels and curricula from the majority of communities and counties of New Jersey, as well as outstanding curricula from other states. Special collections include the Webster Memorial Collection of modern poetry, including many first editions and autographed copies; a collection of early science textbooks; a collection of New Jerseyiana; the Roy W. Hatch Collection of Lincolniana; and the Finley Memorial Collection of outstanding books in the field of natural history. Of special interest is the China Institute Library, a permanent loan from the China Institute of New Jersey. The library maintains a complete file of bulletins of the U. S. Office of Education for which this library is designated as an official depository library in the area. The Library is also a depository for the U. S. Census Reports. An up-to-date and widely-used file of pamphlets, maps and pictures, is available to all students.

Most of the books, including the reference collection, are on open shelves to which the students, as well as faculty, graduates, and teachers-in-service, have access and borrowing privileges. This open-shelf policy applies even to the periodical collection which consists of back issues of all but the most ephemeral of over 300 currently received periodicals. Bound volumes of magazines total over 2,500.

Supplementing the College Library is the library of the College High School which is a large, pleasant room housing 4,500 volumes and located in the College High School. These books are cataloged at the College Library and are available through the main catalog as well as through the catalog of the College High School. The High School Librarian works in close cooperation with the members of the College library staff, particularly in the field of literature for adolescents, in which an extensive and up-to-date collection is maintained.

LIVING ACCOMMODATIONS

During the Summer Session graduate students are accommodated in the dormitories. The rate for the Summer Sessions is \$18.00 a week including room, breakfast, and dinner. These charges are subject to revision.

ADMINISTRATION

The Graduate Division is the administrative unit dealing with all aspects of graduate study. Policies, regulations, and procedures which govern its various programs and courses are developed by the Graduate Council which is appointed by the President of the College.

PURPOSES

Montclair State College will continue as a professional school devoted primarily to the interests of secondary education. This objective is the controlling factor in the development of the curricula, teaching procedures, extra-curricular activities, and college spirit, and tends to unify all the activities of the college—professional, cultural, and social. The major goal of all its courses is the development of the teacher as a professional person.

Graduate courses are organized to serve the purposes of two groups of students:

Group I Those who wish to matriculate for the degree of Master of Arts: Graduates of accredited liberal arts and professional colleges. Secondary teachers, supervisors, principals, and other school administrators, who are graduates of approved colleges.

Group II Those who do not wish to matriculate for the degree: Students who hold graduate degrees but who wish to continue their professional preparation.

College graduates who wish to take courses leading toward secondary school certification.

Students who are matriculated for advanced degrees in other colleges and universities and who plan to transfer their credits.

Special students taking courses for cultural purposes without reference to credit.

Prospective students should note that graduate work consists of an integrated program of advanced, specialized study based on an undergraduate major and/or other adequate background, pre-supposing academic and personal maturity, and making more than the average demand upon the industry, initiative and scholarship of the student, since it involves responsibilities at a higher level than that characterizing the undergraduate programs.

ORGANIZATION

The work is organized to meet the needs of those who wish to do full-time work and of those who are teaching and who wish to take courses in the late afternoon, evening, or on Saturday morning. Consequently, the College now offers senior-graduate, graduate, and certification courses on campus during the late afternoon, evening, and Saturday morning, and off campus in various centers, for the convenience of those desiring professional growth through these means.

Courses of the Extension Division are also offered off campus in any community in New Jersey in which the teachers-in-service desire Montclair State College to offer a particular course and if that course appears in either the Undergraduate Catalog or the Graduate Catalog of the College. It is necessary that twenty or more students enroll in such an extension course and that the local facilities and educational resources be such as to permit the course work to meet the accepted standards of graduate instruction on campus.

Bulletins are published for the information of those who wish to attend part-time, extension, or summer session courses. Credits gained in part-time, extension, or summer session courses are accepted towards a degree or a secondary teacher's certificate. Only those students should register who are willing to meet the full requirements and take all examinations. Permission may be granted in special cases for students to take work for no credit. Other information, including bulletins, may be obtained from the Director of Field Services, Montclair State College, Upper Montclair, New Jersey.

CERTIFICATION STUDENTS

Students holding Bachelor's degrees from other colleges and desiring secondary certification should write to the Secretary of the State Board of Examiners, 175 West State Street, Trenton, New Jersey, submitting a transcript of all previous college work and requesting an evaluation as to what they are lacking in certification for some major area or areas of specialization. Once they have received this evaluation they will then be in a position to confer with the certification officer of the College in the Department of Education, who will assist them in selecting courses to meet the stated certification requirements.

CERTIFICATION STUDENTS AND STUDENT TEACHING

Graduates of other colleges who wish to do their student teaching through Montclair State College should obtain from the Education Office the mimeographed statement outlining the conditions under which it can be done. This group will be expected to meet the standards established for Montclair State College students. Students who desire to meet the State requirement in supervised student teaching must be approved by the Director of Student Teaching and must register for this experience with the Director of Field Services.

CERTIFICATION STUDENTS AND THE MASTER'S DEGREE

Students holding Bachelor's degrees from other colleges must be certified to teach in the area of their major specialization by the time the degree is conferred and should have completed their student teaching as a condition prerequisite to matriculation.

Candidates who lack some of the required courses for full limited secondary certification or certification in other professional or special subjects for both elementary and secondary schools may need to register for some undergraduate courses that will not carry graduate credit. Some of the courses that do carry graduate credit may be counted towards the limited certificate as well as towards the Master's degree. Consequently, graduate students who must meet certification requirements as well as the requirements for the Master's degree will find it necessary to spend additional time on the campus and in student teaching. Supervised student teaching, required for certification, does not carry graduate credit.

ADMISSION AND MATRICULATION FOR THE MASTER'S DEGREE

The applicant for admission must be a graduate of an accredited college or university and must present evidence of his qualifications for advanced study as shown by a high scholastic record, professional training, and experience. In addition, each department may give qualifying examinations such as the Graduate Record Aptitude Test or others which it may consider proper to determine a student's fitness to pursue graduate studies in that department.

Actual matriculation (i.e. formal and official acceptance by the Graduate Office in a program leading to the Master's degree) may be deferred sometimes for good reason until no more than eight semester-hours of graduate work have been taken. However, in the student's own interest it is strongly recommended that he determine his eligibility for matriculation before initiating a program of graduate study. In so doing he will receive proper guidance and counsel and thereby avoid the embarrassment and disappointment which can occur when non-matriculated students pursue work of their own choosing.

Steps in the matriculation process are as follows:

1. The candidate secures from the Graduate Office an application which must be completed and returned to that office.
2. The candidate will have his college send official transcripts of all undergraduate credits (if the applicant is not a graduate of Montclair), to the Chairman of the Graduate Council. Official transcripts should be on file in the Graduate Office before the time of registration for graduate courses.
3. After the application and transcripts have been received and reviewed in the Graduate Office, the candidate will be invited to confer with the Chairman of the Graduate Council.
4. The candidate will next confer with the graduate adviser in the department in which he expects to do his work, and the adviser will develop a program of courses with him.
5. The candidate will then have a final brief conference with the Chairman of the Graduate Council. Following this, the candidate will be advised in writing of the decision of the Graduate Council

and will be furnished with a statement of the work to be completed. Final action on all applicants is vested in the Graduate Council.

Registration, announcements, and procedures:

Announcements are made with the offerings of courses each semester as to when the departmental advisers and the Chairman of the Graduate Council may be consulted. At each registration the student should bring with him his most recent transcript of work taken, as well as a copy of his work program. This will identify his status and also be the basis for appropriate counseling and for a review of his progress to date.

TYPES OF ADMISSION TO THE GRADUATE DIVISION

Admission to the Graduate Division is of the following types:

1. Regular admission for fully matriculated students
2. Conditional (granted because undergraduate deficiencies exist)
3. Probational (granted for one summer or semester, to determine a student's scholastic ability)
4. Transient (granted to students not applying for a degree at this College, and expecting to transfer earned credits elsewhere)
5. Senior-Graduate (granted only to Montclair State College seniors)

Senior students currently enrolled in the College who have good academic records and who are within sixteen semester-hours of graduation may be permitted to take up to eight semester-hours of graduate work concurrently with the balance of their A.B. degree requirements and prior to graduation. Such students must have prior written permission signed by the chairman of the department concerned, the Dean of the College, and the Chairman of the Graduate Council. No graduate credit will be given retroactively for work taken in excess of degree requirements.

PROCEDURE FOR THE ADMISSION OF VETERANS

No prospective veteran student should make application for a Certificate of Eligibility until he has determined his admission status with the Graduate Office.

RESIDENCE REQUIREMENTS AND THE TRANSFER OF CREDITS

For graduates of institutions other than the New Jersey State Colleges and Rutgers University (the State University), a minimum of thirty-two semester-hours of residence work is required. To meet this residence requirement the student must attend the College as a full-time graduate student for one summer session (six semester-hours) or one regular semester. Fully employed teachers are encour-

aged to restrict the graduate work carried during the year, and to take advantage of the course offerings in the summer session when their normal professional responsibilities will not interfere with the intensive study expected of advanced students.

STUDENT LOAD

Graduate work should involve careful and intensive study with ample time to explore areas which may warrant further study.

Twelve to sixteen hours of work per semester is considered a full-time program for the graduate student in residence.

For teachers employed full time, six semester-hours of work in any one semester shall be the maximum load with four semester-hours being recommended.

In the regular six-week summer session, the maximum load shall be eight semester-hours. The Graduate Council strongly recommends that the student consider six semester-hours of work a full program.

IMPLICATIONS OF COURSE NUMBERING

Courses numbered 500-600 are open only to graduate students. Those numbered 400-499 and appearing in this catalog are open to graduate students also, and with special permission they may be taken by advanced undergraduate students who have a high scholastic average.

REQUIREMENTS FOR THE A.M. DEGREE

1. Each student selects a major field in which he must complete such courses as are prescribed and are indicated in the departmental description. To be eligible for matriculation in the major departments (with the exception of Education) a student must have a major of at least thirty semester-hours of work or its approximate equivalent in the area of specialization, and must be certified to teach the major subject in the secondary schools.

2. A minimum of thirty-two semester hours of graduate credit is required for the A.M. degree in all departments and a requirement of additional hours may be added under certain circumstances to this minimum of thirty-two semester-hours. Each major department (with the exception of Education) requires a minimum of eighteen semester-hours of graduate work in its field.

3. The programs in Education require a student to be certified to teach in New Jersey and have teaching experience as prerequisites to matriculation. The programs in this department require that twenty-four of the thirty-two total hours for the A.M. degree be in Education.

4. For graduates of teachers colleges, at least six semester-hours of the required total must be taken in the Department of Education.

EDUCATION 503, *Methods and Instruments of Research*, is required of all students matriculated in the Graduate Division and must be taken in residence.

5. In addition to EDUCATION 503, *Methods and Instruments of Research*, each candidate matriculated after August 31, 1959, will be required to complete EDUCATION 603B, *Principles and Practices of Research*, for two semester-hours, or an equivalent research seminar in the department of his major subject.

6. Four of the total credits may be satisfied by a thesis which meets the approval of the Graduate Council.

7. A candidate who is matriculated for the A.M. degree must attend as a full-time graduate student one summer session (6 semester-hours) or one regular semester.

8. An average of "B" or better is required for work submitted for the Master's degree. No credit is given for work below "C."

9. A majority of the courses taken or credits earned should be on the 500-600 level.

10. Work for the degree must be completed within five years of the date of matriculation. In case an extension of time is required, a request must be filed for such extension with the Chairman of the Graduate Council. The student's progress will be reviewed in accordance with the requirements for the A.M. degree as stated in the most recent Graduate Catalog.

A comprehensive departmental examination is required in all departments. This examination may be written and/or oral. The oral phase of the examination will be on an individual basis. The examination is given by the department in which the student does his major work at least one month before graduation time. No academic credit is given for the examination.

In some departments the thesis may be offered in place of the written comprehensive examination. Usually the oral examination is required in case a thesis or research problem is presented in lieu of the written examination.

APPLICATION FOR CONFERMENT OF DEGREE

Candidates must file with the Registrar an application for conferment of the degree before November 30 of the college year in which the work is to be completed. Application blanks for this purpose may be secured from the Registrar. The burden of responsibility for the request rests with the candidate. This is of special significance to the teacher in service who may have distributed the graduate work over four or five years. The student should note that graduation ceremonies are held in June and August. Attendance is required unless permission for graduation in absentia is granted by the President of the College.

RATING SYSTEM

Marks indicating degrees of achievement in the various courses are given in letters, A, B, C, D, and F.

- A — Excellent
- B — Good
- C — Fair
- D — Poor (No "D" credit may be counted toward the Master's degree.)
- F — Failure
- Inc. — Incomplete work
- WP — Withdrawn, passing
- WF — Withdrawn, failing

Where a student has had an unavoidable absence, or for reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester or summer session. This mark must be removed by a final grade within eight weeks, or the course cannot be credited and the mark becomes "F" automatically.

GENERAL RESTRICTIONS

No credit is granted for:

1. Correspondence work
2. Junior-college courses
3. Graduate courses with a mark below "C"
4. Supervised student teaching
5. More than eight semester-hours of graduate credit prior to matriculation
6. The comprehensive departmental examination
7. More than six semester-hours of graduate credit earned in extension (off-campus) courses
8. Graduate work taken elsewhere unless the student is a graduate of one of the New Jersey State Colleges or the State University, and in such cases no more than eight points
9. Courses taken over ten years ago
10. Certain basic courses on the 400 level which are required for initial certification

FEES AND SERVICE CHARGES

Thirteen dollars (\$13.00) per semester-hour to residents of New Jersey and those non-residents who teach in New Jersey public schools

Fifteen dollars (\$15.00) per semester-hour to non-residents of the State of New Jersey who do not teach in New Jersey public schools

Late Registration Fee, five dollars (\$5.00)
Service charge, fifty cents (\$.50) per semester-hour
Admission fee, five dollars (\$5.00)
Program change fee, two dollars (\$2.00)
Supervised Student Teaching (if required), seventy-eight dollars (\$78.00)

Dormitory fees including room, breakfast, and dinner for a summer session, eighteen dollars (\$18.00) a week

These charges are subject to revision.

All charges are payable during the registration period.

THE MASTER'S THESIS AND RESEARCH

The writing of a Master's thesis is optional. The election to write a thesis should be considered in terms of the subject matter, the opportunities to carry out research on a standard acceptable for a thesis, and the needs of the individual in relation to his plan of graduate study.

Some departments have in effect the equivalent of a thesis requirement except for the formal filing of the complete typed thesis following standard style.

Students in the Social Studies Department complete either a Master's thesis or a Master's essay on a problem which each individual chooses for specialization. The student is then given an oral examination on the paper before a committee of members of the Social Studies Department.

All departments have research seminars which follow the basic course, EDUCATION 503, and are also designed to give the student a good foundation for thesis work. These special departmental provisions are outlined in each departmental statement of requirements.

PROCEDURE AND FORM FOR THESIS WRITING

Students writing a thesis must register with the Chairman of the Graduate Council for the course, GRADUATE 500, *Master's Thesis*, for four semester-hours, with the prior approval of their advisers.

The following information is of aid to students submitting a Master's thesis:

a. Choice of Topic and Plan of Research

The topic and plan of research will be worked out in consultation with the chairman of the student's major department. A sponsor will be appointed by the chairman of the department.

b. Presentation of Outline for Proposed Research

The outline for the proposed research for the thesis must meet the approval of the sponsor, the chairman of the department concerned, the Graduate Council, and the Dean of the College.

c. Mechanics of the Thesis

Each thesis student should be guided by William G. Campbell's *Form and Style in Thesis Writing* which may be borrowed from the Library or purchased at the College Bookstore.

d. Submitting the Thesis

A typewritten copy of the thesis must be submitted to the sponsor who, if he approves of it, will submit the thesis to a reading committee. This should be done not later than six weeks prior to the date of graduation. Any changes recommended by the reading committee must be made by the candidate. Three typewritten copies of the thesis, as finally approved, must be presented by the candidate to the chairman of his major department at least two weeks before the date of graduation. Final acceptance rests with the Graduate Council. Upon acceptance, two copies must be filed with the college librarian.

e. An acceptable thesis shall show evidence that:

1. The candidate has comprehended the essentials of his problem, followed a well-organized plan of work, and offered satisfactory solutions.
2. The candidate has made an independent and intensive study of his problem.
3. The candidate has made a comprehensive study of the literature of his subject.
4. The candidate's conclusions are justified by his findings.
5. The candidate has a practical working knowledge of research methods.
6. The thesis is not a duplicate of a similar study.
7. The data involve a sufficient fund of information to make the findings significant.
8. The thesis is of definite value to the teaching profession.

Students are expected to complete the thesis within one calendar year. An extension of time may be granted by the Chairman of the Graduate Council. If granted, the student must re-register for GRADUATE 500 on a no-credit basis and pay a fee for two (2) semester-hours. This extension will be for six calendar months.

MASTER'S DEGREE MAJOR AREAS

Majors in graduate work are offered in the fields of Administration and Supervision, Business Education, English, Industrial Arts, Mathematics, Personnel and Guidance, Science, Social Studies, and Speech.

Each curriculum provides for three areas of course work: A basic core of professional education courses on a graduate level, advanced major subject matter courses, and a group of course electives which give the student the opportunity for both breadth and depth in the area of general education. The amount of each type depends on the candidate's undergraduate work and is determined by the student's graduate adviser.

Students choosing a major field of study at the graduate level should keep in mind that certain experience requirements are needed in the fields of Administration and Supervision and Personnel and Guidance. Furthermore, enrollment in certain Education courses is limited to those who are having or who have had actual teaching experience. For details see page 31.

PROFESSIONAL AND ACADEMIC STATUS OF THE COLLEGE

Montclair State College is a fully accredited member of the Middle States Association of Colleges and Secondary Schools, and the American Association of University Women. Credits are exchangeable among colleges and universities which are members of the above regional and national associations. The National Council for the Accreditation of Teacher Education granted Full Accreditation to Montclair State College for the preparation of Elementary and Secondary school teachers, and School Service Personnel, with the Master's degree as the highest degree approved.

DEPARTMENT OF BUSINESS EDUCATION

The graduate work in the Department of Business Education is designed to prepare teachers of business education for administrative, supervisory, specialized work or master teaching in the field of business education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement, and professional needs.

Graduate work toward the Master of Arts degree in Business Education presupposes the completion of an undergraduate major in business education, or its equivalent. The undergraduate major is based on the requirements as established by the New Jersey State Board of Education. For further details see the Undergraduate Bulletin.

In lieu of four of the thirty-two semester-hours of credit required for the Master of Arts degree, the candidate may write a thesis giving the results of some study in the field of business education or its teaching. This study may be made only after consultation with the Chairman of the Business Education Department. Plans should be made to have such a study in its final form and approved by the Department of Business Education by May 1st of the year in which the degree is expected to be conferred.

All candidates for the Master of Arts degree in Business Education must pass a comprehensive examination before they are granted the degree. This examination is given the first Saturday in April and the last Saturday in July for those candidates anticipating graduation. It is general in nature and is intended to test the candidate's maturity of thought with respect to business education.

GRADUATE PROGRAM OF STUDIES

MASTER OF ARTS DEGREE IN BUSINESS EDUCATION

Division I. Required Integration Department Courses (6 s. h. required)

Ed. 503.	Methods and Instruments of Research	2 s. h.
Ed. 500A.	Basic Educational Trends	2 s. h.
Elective	To be chosen on recommendation and approval of the Chairman of the Department of Business Education	2 s. h.

Division II. Research Seminar, Field Work and Thesis (8 to 10 s. h.)

B. E. 501A + B.	Research Seminar in Business Education (required of all candidates)	4 s. h.
Graduate 500.	Thesis*	4 s. h.
B. E. 532.	Field Studies and Audio-Visual Aids in Business Education or	4 s. h.
B. E. 533.	Supervised Work Experience and Seminar	

*Division III. Required Business Professional Courses**Group A—(4 s. h. required)*

B. E. 502.	Principles and Problems of Business Education	2 s. h.
B. E. 503.	The Business Education Curriculum	2 s. h.
B. E. 504.	Administration and Supervision of Business Education	2 s. h.
B. E. 505.	Tests and Measurements in Business Education	2 s. h.

Group B—(4 s. h. required)

B. E. 520.	Improvement of Instruction in Business Education	
Part A.	General Business Subjects	2 s. h.
Part B.	Bookkeeping, Accounting, and Business Arithmetic	2 s. h.
Part C.	Secretarial Subjects	2 s. h.
Either part may be elected separately. A minimum of two parts must be completed.		

Division IV. Elective Subject-Matter Courses

(8 to 10 s. h. required—dependent on the total accumulated in Division II—to be selected after consultation with the Chairman of the Department of Business Education.)

* Students writing a thesis will take B. E. 501A and will substitute four (4) semester-hours for the thesis in place of B. E. 501B. This will count as a total of six (6) semester-hours in research and thesis.

THE GRADUATE COURSES

BUSINESS EDUCATION 501A AND B. *Research Seminar in Business Education*

This course deals with research and literature in the field of business education. The emphasis is placed on making the classroom teacher an intelligent consumer of the current research findings and publications related to business education.

Credit: 4 semester-hours

BUSINESS EDUCATION 502. *Principles and Problems of Business Education*

The purpose of this course is to survey the basic principles and practices of business education. Among the topics considered are: history of the high school business program, purposes, attitudes of management and labor toward education, the relationship of general education to business education, and trends in the field.

Credit: 2 semester-hours

BUSINESS EDUCATION 503. *The Business Education Curriculum*

This course is a sequel to BUSINESS EDUCATION 502 which should be completed as a prerequisite. It deals with the curricula in business education for various levels and types of schools. In this course, the student learns how to evaluate present programs and to make recommendations for needed changes.

Credit: 2 semester-hours

BUSINESS EDUCATION 504. *Administration and Supervision of Business Education*

This course offers an opportunity to study the problems of organizing, directing, and supervising business education programs. Such matters as the functions of the administrator and supervisor of business education, textbook selection, teacher selection, testing programs, conferences, and equipment and layout are considered.

Credit: 2 semester-hours

BUSINESS EDUCATION 505. *Tests and Measurements in Business Education*

This course deals with constructing, administering, interpreting, and evaluating all types of testing materials in business subjects.

Credit: 2 semester-hours

BUSINESS EDUCATION 516. *Business Organization and Management II*

The problem approach is used in this advanced course in considering such topics as business ownership, finances, location and layouts, purchasing personnel, and managerial controls.

Credit: 2 semester-hours

BUSINESS EDUCATION 518. *Advertising II*

This advanced course in advertising offers an opportunity to study in some detail the uses of various advertising media such as newspapers, magazines, radio, television, and direct mail, and to evaluate their effectiveness in terms of campaigns.

Credit: 2 semester-hours

BUSINESS EDUCATION 520A, B, C. *Improvement of Instruction in Business Education*

This course gives the experienced business teacher an opportunity to study the content, methods, teaching aids, and evaluation procedures in at least two * of the three specialized fields:

BUS. ED. 520A.* *General Business Subjects*

Credit: 2 semester-hours

BUS. ED. 520B.* *Bookkeeping, Accounting, and Business Arithmetic*

Credit: 2 semester-hours

BUS. ED. 520C.* *Secretarial Subjects*

Credit: 2 semester-hours

Note: A minimum of two (2) parts of Bus. Ed. 520 must be completed.

BUSINESS EDUCATION 532. *Field Studies and Audio-Visual Aids in Business Education*

This course gives the classroom teacher an opportunity to visit and evaluate some of the practices of many business offices, industries, and retailing organizations located in the metropolitan area. It also provides for a study of the many audio and visual aids available for use in business classes.

Credit: 4 semester-hours

BUSINESS EDUCATION 533. *Supervised Work Experience and Seminar*

The graduate student who has not had extensive business experience has an opportunity to work full-time for six weeks during the summer in a business position under College supervision. An evening conference is held weekly to discuss problems related to the work experience program.

Credit: 4 semester-hours

BUSINESS EDUCATION 540. *Auditing*

This course seeks to develop the meaning and techniques of auditing procedure. It includes practice in the fundamental mechanics of auditing as well as in the making of the formal report on an audit.

Prerequisite: 8 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 541. *Tax Accounting*

The primary purpose of this course is to give a comprehensive picture of the Federal Tax structure, and to provide training in the application of basic principles to specific problems of the individual and corporation.

Prerequisite: 6 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 542A. *Advanced Business Law Cases I*

This course presupposes a knowledge of the basic principles of business law. It is designed to furnish a broader understanding and background in areas requiring considerable training to be effective in the classroom. Cases are concerned with the topics of contracts, negotiable instruments, and insurance.

Credit: 2 semester-hours

BUSINESS EDUCATION 542B. *Advanced Business Law Cases II*

This advanced law course is a continuation of Bus. Ed. 542A, but course 542A is not a prerequisite. A basic knowledge of the principles of law is, however, required. The course includes a further study of law cases pertaining to bailments, carriers, sales, property, landlord and tenant, torts, and business crimes.

Credit: 2 semester-hours

BUSINESS EDUCATION 543A. *Advanced Accounting I*

The content of this course emphasizes an intensive study of the items making up accounting statements and the principles of valuation and income determination. Problem solving is an integral part of the course. At least eight semester-hours of accounting are required as a prerequisite.

Credit: 2 semester-hours

BUSINESS EDUCATION 543B. *Advanced Accounting II*

This course is a continuation of Bus. Ed. 543A, but course 543A is not a prerequisite. Topics treated include consignments, agency and branch accounting, consolidations, receivership accounting, estate and trust accounting. At least eight semester-hours of accounting are required as a prerequisite.

Credit: 2 semester-hours

BUSINESS EDUCATION 544A, B, C, D. *Workshops in Secretarial and Clerical Practice, Advanced Stenography, Typewriting, Office Machines*

These workshops which run simultaneously when the class is small provide an opportunity for the study, planning, and development of teaching materials and projects fitted to the particular situation in which the person is teaching. The workshops are held in the office-practice room where equipment and reference materials are available. Instruction is on an individual and small-group basis with occasional seminar meetings of the entire group. This is a class where ideas forced to lie dormant during the busy school year may be brought to fruition. There is complete freedom to experiment on individual teaching problems.

Credit: 2 semester-hours each

SENIOR GRADUATE COURSES

The following courses are not required for the Master's degree in Business Education. With the approval of the Chairman of the Department, they may be used as elective credits.

BUSINESS EDUCATION 401B. *Methods of Teaching Bookkeeping and Accounting*

A brief study is made of the history and development of book-keeping instruction and materials, and aims and objectives in the light of current trends. Special attention is given to the problems of text-book selection, lesson planning, classroom and teaching procedures, tests and measurements, audio-visual and other teaching aids. Opportunities are given students to present lessons for criticism and evaluation. A test of subject-matter competency is required.

Prerequisite: 12 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 401C. *Methods of Teaching Secretarial Studies*

Techniques of teaching beginning stenography, advanced dictation and transcription, secretarial training, and clerical practice are provided in this course. Attention is given to the latest teaching materials, audio-visual aids, equipment, and supplies.

Teaching the skills of the clerical and secretarial worker is stressed; in addition, the traits, attitudes, work habits, and understandings which, if developed, permit an office worker to make a real contribution to the business world and to society are analyzed. The unique opportunities present in the preparation of the secretarial worker for service to the school and to the community are surveyed. A test of subject-matter competency in each field is required.

Credit: 2 semester-hours

BUSINESS EDUCATION 403. *Advanced Dictation and Transcription, II*

This course is designed for the teacher of stenography and transcription who wishes to study the problems of dictation and transcription from the viewpoint of his own class situation and also to improve his skill.

Those who take this course should have had a methods course in stenography and have had at least student-teaching experience.

Credit: 2 semester-hours

BUSINESS EDUCATION 404. *Business Economics*

This course deals with the business aspects of economics as related to immediate and long-range post-war problems; operation and government control of public utilities; taxation, government finance, and labor and management problems.

Credit: 2 semester-hours

BUSINESS EDUCATION 405. *Office Practice—Clerical*

Office machines commonly used by the bookkeeper and clerical worker are studied in this course. Actual training is given on the 10-key and full keyboard adding listing machines, the rotary and key-driven calculating machines, and the posting machine. Other office skills necessary for the clerical worker to possess are stressed. Limited instruction is provided on the voice-writing and duplicating equipment.

Techniques of job analysis, including job description, job breakdown, and job evaluation are practiced.

Credit: 3 semester-hours

BUSINESS EDUCATION 406. *Advertising, I*

This course aims to acquaint the student with the social and economic aspects of advertising so that a fair evaluation may be made of its worth as well as its undesirable aspects. Copy appeals, the writing of copy, advertising layouts, and the selection of appropriate types of media for various advertisements are considered. Emphasis is placed on the research aspects of the subject so important today.

Credit: 2 semester-hours

BUSINESS EDUCATION 407. *Office Practice—Secretarial*

The secretary must be acquainted with office procedure and must be able to operate many different office machines. This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied, with considerable attention being paid to filing. Understanding of office procedures and stenographic skill are strengthened through supervised office assignments and class work projects.

Credit: 3 semester-hours

BUSINESS EDUCATION 408. *Business Finance*

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stock, borrowed capital, mortgages, bonds, and notes are solved.

Credit: 3 semester-hours

BUSINESS EDUCATION 409. *Consumer Education*

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and the development of intelligent techniques for buying and using consumer goods and services.

Credit: 3 semester-hours

BUSINESS EDUCATION 410. *Advanced Accounting*

This is an advanced course for students who have had two years of accounting. Emphasis is placed on techniques of problem solving. Included are problems relating to basic accounting principles, cost accounting, and intermediate accounting. Considered are the determination of net income on accrual, cash and installment bases; problems of valuation, including problems of depreciation, depletion, and amortization; consignments; preparation and analysis of financial statements, including analysis of net change in gross profit and net change in working capital; partnership formation, operation, dissolution, and liquidation; bankruptcy, reorganization, and recapitalization, and consolidated balance sheets and income statements.

Prerequisites: BUSINESS EDUCATION 201, BUSINESS EDUCATION 202, BUSINESS EDUCATION 301, BUSINESS EDUCATION 302

Credit: 2 semester-hours

BUSINESS EDUCATION 411. *Tax Accounting*

The purpose of this course is to give a comprehensive picture of the Federal Tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in the filing of individual tax returns are carefully studied. Opportunity is provided for the student to master the problems encountered in completing individual tax returns.

Prerequisite: 12 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 412. *Project Development in Consumer Education*

This course permits the student to explore in a specialized fashion two major areas of consumer education. Two projects are developed, one on housing and the other on the furnishing of a home. The basic purposes of this course are to illustrate the handling of material and the procedures that might be used in developing other consumer education units.

Prerequisite: An undergraduate course in consumer education or economics

Credit: 2 semester-hours

BUSINESS EDUCATION 414. *Merchandising, I*

This course analyzes the problems of how, what, where, and when to buy; the terms of purchasing; tested receiving and marketing procedures; the mathematics of merchandising—setting the retail price, planning mark-up and mark-down; and inventory controls. It is designed to assist the teacher of the prospective or actual small businessman.

Credit: 2 semester-hours

BUSINESS EDUCATION 417. *Marketing*

Marketing is the process of transferring goods from the producer to the consumer. The functions involved in the process, the various channels of distribution, marketing institutions, and the costs of marketing are considered in this course. Such topics as auctions, produce exchanges, wholesalers, retailing, department and mail-order stores, chain stores, cooperatives, profits, and prices are included.

Credit: 2 semester-hours

BUSINESS EDUCATION 418. *Retail Store Management*

The work of the store manager in retail store operation is fully explored in this course. The problems of organization and management as they are encountered in various types of retail stores are discussed. Consideration is given to trends, principles, and practices in small and large stores in both the independent and chain-store fields.

Credit: 2 semester-hours

BUSINESS EDUCATION 420. *Field Studies in Business Education*

This orientation course aims to introduce business-education students, through direct observational techniques, to the realities of the business world. Six field trips are made in the New York Metropolitan Area which include visits to business organizations where the following types of business activity or relationships may be observed: production; merchandising and advertising; finance; transportation and communication; employer-employee relationships; government and business relationships. The field trips are supplemented by regular class sessions where discussions are held and visual aids presented to make the visits more meaningful.

Credit: 2 semester-hours

BUSINESS EDUCATION 421. *Finance and Investments for Families*

This course applies the principles of budgeting, banking, insurance, finance, and investments to the complicated problems facing individuals and families in these areas. It deals with budgets; savings; banking; life insurance; general insurance annuities; pensions; wills; such investments as stocks, bonds, and mutual funds; homes; and small business enterprises.

Credit: 2 semester-hours

DEPARTMENT OF EDUCATION

Graduate courses in this department meet one or more of three needs: (1) instruction in the Administration and Supervision major leading to the A.M. degree and New Jersey certification for one or more of the positions of Subject Supervisor, General Secondary Supervisor, and Secondary School Principal; (2) instruction in the Personnel and Guidance major leading to the A.M. degree and New Jersey certification in guidance; and (3) advanced professional instruction for administrators, supervisors, counselors, and classroom teachers.

In pursuit of the above objectives most graduate courses in the Education Department are designed for students with teaching experience. Other graduate courses presuppose at least a teaching certificate.

Graduate students who do not hold teaching certificates will enroll in undergraduate and senior-graduate (400 level) courses in order to meet certification requirements. If an insufficient number of these courses is being offered, these uncertificated graduate students may also enroll, with the approval of the Chairman of the Education Department, in the following graduate courses in the Education Department: 500B, 500C, 505, 520, 550, 551.

Graduate students working toward an A.M. degree in Administration and Supervision are required to have at least two years of teaching experience before matriculation; those majoring in Personnel and Guidance are required to have at least two years of teaching experience before the degree will be conferred.

Students who plan to remain classroom teachers are not encouraged to seek an A.M. degree in either Administration and Supervision or Personnel and Guidance.

Courses in the teaching of elementary-school subjects are open only to regular Montclair State College undergraduates or to holders of the A.B. degree from the Montclair State College.

I. COURSE REQUIREMENTS FOR THE A.M. DEGREE IN ADMINISTRATION AND SUPERVISION

- A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience completed prior to matriculation. Not more than eight semester-hours of work taken prior to matriculation may be counted toward this degree.
- B. Graduates of New Jersey State Colleges and Rutgers, The State University, may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Program Adviser and the Chairman of the Graduate Council.

- C. Satisfactory completion of not fewer than thirty-two semester-hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval by the Program Adviser.)

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| 1. Required Courses—18 semester-hours | S. H. |
| Ed. 500D. <i>School Administration I: Functions and Organization</i> | 2 |
| Ed. 500E. <i>School Administration II: Law and Finance</i> | 2 |
| Ed. 500F. <i>School Administration III: Community Relations</i> | 2 |
| Ed. 502. <i>Organization and Administration of the Modern High School</i> | 2 |
| Ed. 503. <i>Methods and Instruments of Research</i> | 2 |
| Ed. 504A. <i>Curriculum Construction in the Secondary School</i> | 2 |
| or | |
| Ed. 553. <i>Core-Curriculum and Life-Adjustment Programs in High Schools</i> | |
| Ed. 505. <i>Organization and Administration of Extra-Curricular Activities</i> | 2 |
| Ed. 508. <i>Supervision of Instruction in Secondary Schools</i> | 2 |
| Ed. 551. <i>Principles and Techniques of Guidance</i> | 2 |
2. Education Department Electives (8 semester-hours)
The student, with his adviser's approval, will select eight semester-hours in additional Education Department courses numbered 406 or above.
3. Electives in Other Departments (6 semester-hours)
The student, with his adviser's approval, will select six semester-hours of course work in other departments. It is intended that the electives chosen shall be of a liberal-cultural orientation selected to broaden the student's interests and background.

II. COURSE REQUIREMENTS FOR THE A. M. DEGREE IN PERSONNEL AND GUIDANCE

- A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience. One year of this experience must be completed prior to matriculation. (Not more than eight semester-hours will be counted toward this degree prior to the obtaining of this certificate and the beginning of this experience.)

- B. Satisfactory completion of not fewer than 32 semester-hours as follows:

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| 1. Basic Requirements (Total of 20 semester-hours) | S. H. |
| either Ed. 500B. <i>Advanced Educational Psychology</i> | 2 |
| or Ed. 550. <i>Child and Adolescent Development</i> | |
| Ed. 500F. <i>School Administration III, Community Relations</i> | 2 |
| Ed. 503. <i>Methods and Instruments of Research</i> | 2 |
| Ed. 520. <i>Principles of Mental Hygiene</i> | 2 |
| Ed. 521A. <i>Educational and Psychological Measurement in Guidance</i> | 2 |
| Ed. 535. <i>Vocational Guidance</i> | 2 |
| Ed. 536. <i>Educational Guidance</i> | 2 |
| Ed. 537. <i>Social-Moral Guidance</i> | 2 |
| Ed. 538. <i>Group Guidance and Counseling Activities</i> | 2 |
| Ed. 551. <i>Principles and Techniques of Guidance</i> | 2 |

2. Primary Electives (Minimum of 4 semester-hours required)	
Ed. 602. <i>Seminar in Guidance</i>	4
Ed. 505. <i>Organization and Administration of Extra-Curricular Activities</i>	2
Ed. 530A. <i>Corrective and Remedial Reading in Secondary Schools</i>	2
Ed. 521B. <i>Psychological Tests in Guidance Programs</i>	2
Speech 466. <i>Speech Development: Improvement and Re-education</i>	2
3. Secondary Electives (Maximum of 8 semester-hours permitted)	
Courses in related and unrelated subjects in other departments of the College	
Soc. St. 439. <i>The Family and Its Problems</i>	2
Soc. St. 443. <i>Youth and the Community</i>	2
Soc. St. 444. <i>The Social Bases of Human Relations</i>	2
Soc. St. 450. <i>Modern Economic Problems</i>	4
Speech 464. <i>Psychology of Oral Communication</i>	2
Ed. 409. <i>Radio and Sound Equipment in the Classroom</i>	2
OR any other courses in the graduate program	
Total	32

NOTE:

1. Graduates from New Jersey State Colleges may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Chairman of the Graduate Council.

GRADUATE COURSES

EDUCATION 500A. *Basic Educational Trends*

This course deals with a study of those concepts or principles which have gradually emerged from the mass of educational theory, practice, and research to a point where they have been generally validated and accepted. Such a study is intended as a summarization aimed at achieving a better perspective of the relationship of specific items to the total educational pattern.

Credit: 2 semester-hours

EDUCATION 500B. *Advanced Educational Psychology*

The course covers the various aspects of growth. Individual differences, their measurement, and their bearing on educational practices and principles furnish topics of study and discussion. Principles and laws of learning are reviewed. Some time is given to problems of personality as encountered in school work. The several points of view which have been prominent in the psychology of the past fifty to seventy-five years are examined for their contributions to thinking about human nature.

Prerequisite: An introductory course in psychology

Credit: 2 semester-hours

EDUCATION 500C. *Recent Trends in Secondary School Methods*

This course emphasizes the fundamental principles underlying the technique of teaching on the secondary school level. Some of the topics considered are: organization of knowledge, the logical and psychological aspects of method, developing appreciations, social-moral education, teaching motor control, fixing motor responses, books and verbalism, meeting individual differences, guidance in study, tests and examinations, marks and marking.

Credit: 2 semester-hours

EDUCATION 500D. *School Administration I: Functions and Organization*

This is the basic course in the organization and administration of the American school system at the national, state, intermediate, and local levels. The purposes and nature of school administration are studied. Other topics considered include: the superintendency, personnel problems, records and reports, plant administration, business administration, auxiliary services, administration of curriculum, instruction, guidance, and pupil personnel.

Credit: 2 semester-hours

EDUCATION 500E. *School Administration: Law and Finance*

This course acquaints the student with the allied fields of school law and school finance, with special reference to New Jersey. The topics studied include: a unit on the current economic environment, State and local taxation, State aid theory and practice, school district indebtedness, the budgetary process, legal theory, the relationship of school government to other governments, the judicial functions of the State Commissioner of Education and the State Board of Education, and the rights and duties of school boards and officials and employees. Students who have had EDUCATION 506, *School Law*, and/or EDUCATION 507, *School Finance*, are not permitted to take EDUCATION 500E.

Credit: 2 semester-hours

EDUCATION 500F. *School Administration III: Community Relations*

This course concerns the relation of the school to other educational efforts of the community. It considers the scope and types of agencies and informal influences of an educational nature, and also the agencies and methods by which the best total co-operative effort can be attained. It deals also with methods and plans of publicity. Constant reference throughout is made to New Jersey localities.

Credit: 2 semester-hours

EDUCATION 502. *Organization and Administration of the Modern High School*

The following topics are considered: the student personnel, building and revising the high school curriculum, providing for individual differences, making the school schedule, records, the guidance program, pupil participation in government, the extra-curricular program, the health program, the safety program, discipline, library and study hall, cafeteria, the principal's office, and evaluating results.

Prerequisite: EDUCATION 500D or equivalent

Credit: 2 semester-hours

EDUCATION 503. *Methods and Instruments of Research*

This course is required of and restricted to all regularly matriculated candidates for the Master's degree without regard to their field of major interest. Its purpose is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course the student sets up a problem and plans and carries out its solution. It is recommended that this course be taken rather early in the graduate program and precede work in departmental seminar or research courses.

Prerequisite: MATHEMATICS 400 or equivalent

Credit: 2 semester-hours

EDUCATION 504A. *Curriculum Construction in the Secondary School*

The purpose of this course is to introduce the student to constructive criticism of American culture, to consider the extent to which the secondary school curriculum meets the needs of a changing civilization, and to consider effective means of curriculum construction.

Credit: 2 semester-hours

EDUCATION 504B. *Seminar in Curriculum Organization*

This course is for students actively engaged in problems of curriculum reconstruction and those who are anticipating committee work in this field. It concerns both the elementary and secondary levels. This represents advanced work which depends on previous study in the curriculum area. EDUCATION 504A, EDUCATION 548, or EDUCATION 553 is prerequisite to this course.

Credit: 2 semester-hours

EDUCATION 505. *Organization and Administration of Extra-Curricular Activities*

The first part of this course considers such general problems of extra-curricular activities as: their growing importance; their relation to the curriculum; the principles underlying their organization, administration, and supervision; and methods of financing. In the second part, an intensive study is made of the home room, the assembly, the student council, clubs, athletics, school publications, and other activities in which the class is especially interested.

Credit: 2 semester-hours

EDUCATION 506. *School Law*

After an introductory general study of such topics as: legal theory, the separation of school government from other local government, the appellate function of the State Commissioner of Education and the State Board of Education, the course is concerned principally with a study of New Jersey school laws (Title 18 of the Revised Statutes) and decisions. Students who have taken EDUCATION 500E, *School Administration II: Law and Finance*, for credit are not permitted to take either EDUCATION 506 or EDUCATION 507. EDUCATION 506 and EDUCATION 507 may be substituted for the required course, EDUCATION 500E, in the graduate program in Administration and Supervision.

Credit: 2 semester-hours

EDUCATION 507. *School Finance*

After an introductory unit concerned with the current economic environment, this course is devoted to a study of state and local taxation, state school-aid theory and practice, school-district indebtedness, cost-quality relationships, Federal aid, fiscal controls, and the budgetary process. Students who have taken EDUCATION 500E, *School Administration II: Law and Finance*, for credit are not permitted to take either EDUCATION 506 or EDUCATION 507. EDUCATION 506 and EDUCATION 507 may be substituted for the required course, EDUCATION 500E, in the graduate program in Administration and Supervision.

Credit: 2 semester-hours

EDUCATION 508. *Supervision of Instruction in Secondary Schools*

This course emphasizes the more practical phases of supervision which are met most frequently by those engaged in it. Among the topics are: the set-up for adequate supervision, supervision as encouraging and guiding the growth of teachers and the improvement of educational procedures, the supervisory functions of teachers' meet-

ings, discussion groups, general and professional reading, the writing of articles, co-operative curriculum modification, utilization of community resources, and teacher intervisitation.

Credit: 2 semester-hours

EDUCATION 509. *Secondary School Building Planning*

This course deals with the educational planning of secondary-school buildings. The preparation of educational specifications and space requirements is considered. Topics considered include the planning of offices, classrooms, auditoriums, gymnasiums, laboratories, shops, libraries, cafeterias, and other spaces.

Prerequisites: EDUCATION 502 and EDUCATION 504A or equivalent

Credit: 2 semester-hours

EDUCATION 510. *Seminar in Secondary Administration and Supervision*

In this course the class makes an intensive study of administrative and supervisory problems suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey and the country. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends upon previous study or experience in educational administration or supervision. (Prerequisites: EDUCATION 502 or 601A, and 508 or 601B.)

Credit: 2 semester-hours

EDUCATION 520. *Principles of Mental Hygiene*

This course is designed to be a general survey of the principles and practices of mental health with special reference to the mental health of teacher and pupil. It involves a thorough grounding in fundamental principles of mental hygiene with much practical consideration of the mental-health values of instructional programs and procedures. Discussion centers on practical efforts to develop wholesome personalities in our schools.

Credit: 2 semester-hours

EDUCATION 521A. *Educational and Psychological Measurement in Guidance*

This course deals with fundamentals of educational and psychological measurements in guidance: test theory, statistical concepts, test construction, evaluation, and interpretation. The place of tests in the instructional program is stressed.

Prerequisite: This course is open only to those with teaching experience.

Credit: 2 semester-hours

EDUCATION 521B. *Psychological Tests in Guidance Programs*

This course is designed to familiarize the student with various psychological tests and scales that may be used in guidance programs in the secondary school. The student is given practice in administering many types of group tests. This includes scoring the tests and evaluating the results, with a discussion of ways in which these results may be used. Much time is spent in actual laboratory demonstrations of tests, giving students an opportunity to serve as subjects and as examiners. Class discussion is based upon first-hand information gained through use of the tests, on readings, and on class reports.

Prerequisite: EDUCATION 521A

Credit: 2 semester-hours

EDUCATION 529. *Field Work in Guidance*

The aim of the course is to introduce the student to various aspects of guidance through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject. Prerequisites are: experience in teaching; familiarity with the literature on all aspects of guidance and mental hygiene; and EDUCATION 500B, 520, and 551. This work is conducted by seminar and individual guidance. The hours for the conferences are arranged personally by student and instructor.

Credit: 4 semester-hours

EDUCATION 530A. *Corrective and Remedial Reading in Secondary Schools*

This course offers an investigation and interpretation of the reading problems which are found in secondary school classes. A study is made of the causes of reading difficulties, methods of diagnosis, and techniques of remedial and corrective teaching. Particular attention is given to the selection and adaptation of suitable curriculum materials. Guidance is given to teachers with individual case problems of retarded, normal, and superior pupils. Illustrative material is taken from case studies developed by classroom teachers.

Credit: 2 semester-hours

EDUCATION 530B. *Workshop in Corrective and Remedial Reading in Secondary Schools*

This course is designed for students who are directing or instituting programs of remedial and corrective reading and for those who are teaching individuals and classes in such programs. For the most part

each student works intensively on his own teaching problem, receiving suggestions and recommendations as the work progresses. Some topics of common interest are: diagnosis, remediation, evaluation, organization and administration of reading programs; use and cost of materials and equipment; relation to the rest of the educational program of the school.

Prerequisite: EDUCATION 530A or the equivalent, or considerable experience in remedial work

Credit: 2 semester-hours

EDUCATION 532. *The Supervision and Teaching of Reading in Elementary Schools*

The place of reading in the entire elementary school program is analyzed. Attention is given to necessary remedial work for junior high school students. Materials and their use in instructional programs are studied with a view toward increasing power. All growth levels are considered. Good first teaching is of primary concern; however, the analysis and correction of certain reading difficulties constitute an important portion of the course.

Credit: 2 semester-hours

EDUCATION 534. *Community Resources for Guidance*

This course deals with the various agencies, industries, and institutions available in the surrounding communities for use in guiding students. In addition to becoming familiar with the location and nature of these facilities students learn the techniques for arranging student interviews and visits. Class discussion and personal research are supplemented by field trips.

Credit: 2 semester-hours

EDUCATION 535. *Vocational Guidance*

This course is intended for counselors in the junior and senior high schools to obtain information about the principles and philosophy of vocational education and the techniques of counseling youths who wish to receive pre-employment training, and for counselors of out-of-school groups who are attempting to make readjustments to occupational life. Attention is also given to guidance techniques for job preparation and readjustment, the matching of educational and personal abilities to job specifications, the effects of social legislation on the employment of youths, and a study of techniques used in determining occupational needs and occupational changes.

Credit: 2 semester-hours

EDUCATION 536. *Educational Guidance*

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made.

Credit: 2 semester-hours

EDUCATION 537. *Social-Moral Guidance*

This course is concerned with the non-vocational and non-academic personal and social problems of pupils as well as with the development of techniques by which counselors can integrate the pupil's personal life with the mores and customs of society. It also includes a study of the possible services of various community agencies and a study of the counselor's relation to problems of discipline and citizenship education.

Credit: 2 semester-hours

EDUCATION 538. *Group Guidance and Counseling Activities*

This course is concerned with the various techniques for helping individual pupils and for using group activities including role-playing as a guidance technique. The group activities considered include those of home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college nights, and career days.

Credit: 2 semester-hours

EDUCATION 539. *Elementary School Guidance Services*

This course is designed for guidance counselors in the public schools with particular emphasis on the guidance services that may be offered in grades kindergarten through six. The guidance program, as established in the public schools, envisions supervision and administration of the guidance program from the kindergarten through graduation at grade twelve. It is important, therefore, that the guidance director understands the services that can be made available to the elementary school.

Prerequisite: EDUCATION 551

Credit: 2 semester-hours

EDUCATION 540. *Recreational and Activity Leadership*

It is the aim of the course to furnish each student with practical skills that are of service in dealing with young people of high school age. The practical side is supplemented by a thorough consideration of source material and theory. A partial list of the areas covered in the course follows: how to organize and handle groups, the use of

leaders from within the group, indoor games, outdoor games, special hikes, outdoor cooking, camp-fire leadership. Special field trips are provided to observe camps and playgrounds in operation.

Credit: 2 semester-hours

EDUCATION 548. *Curriculum Construction in the Elementary School*

This course offers an opportunity to review state and city elementary curricula; to discuss the principles of curriculum construction; to collect new teaching materials for the various subjects; and to evaluate, organize, and grade these materials. Teaching procedures in the use of materials are discussed and evaluated in terms of pupil needs, the objectives set up, and the results obtained. This course offers an opportunity to make a special study of the materials and procedures to be used in the supervision of the language arts.

Credit: 2 semester-hours

EDUCATION 550. *Child and Adolescent Development*

This course reviews the general characteristics of child and adolescent development: motor and physiological, social, emotional, language, intellectual, and interests and ideals. The influences of home, school, community, and institutional life on child and adolescent development are considered as well as problems of guidance presented by children in the normal course of development and also those presented by deviations from the normal course.

Credit: 2 semester-hours

EDUCATION 551. *Principles and Techniques of Guidance*

Topics included in this course cover: philosophy of guidance, history of the guidance movement, the need for guidance presented by children and adolescents. The methods of gathering useful data are studied, and school records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students.

Credit: 2 semester-hours

EDUCATION 552. *The Junior College Curriculum*

This course considers admission requirements, required and elective courses, course contents, and supplementary extra-curricular and guidance activities of the junior college. As a background for a consideration of the principles underlying junior college curricula, there is a brief treatment of the beginnings, aims and functions, administrative organizations, and general trends of American junior colleges.

Credit: 2 semester-hours

EDUCATION 553. *Core-Curriculum and Life-Adjustment Programs in High Schools*

This course concerns two leading educational developments of the last decade after a discussion of their philosophy and historical antecedents. The most significant school programs already adopted to put these developments into practice are presented in detail.

Credit: 2 semester-hours

EDUCATION 554A and 554B. *Psychology and Education of Exceptional Children*

This course surveys current practices and problems in the education of children with physical, mental, and emotional handicaps, and of gifted children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children.

Credit: 2 semester-hours each

EDUCATION 556. *Improvement of Reading in the Secondary School*

This course is planned to present a complete picture of the reading process in its general and specialized aspects as it functions in the various subject-matter fields of the secondary school. Problems in reading are examined, and procedures for the development of growth in personality, interests, understandings, insights, critical thinking, tastes, and appreciations are studied through an examination of the results of recent research.

Credit: 2 semester-hours

EDUCATION 601. *Workshop in Education*

Section A—Organizing and Administering the School

Section B—Supervising Instruction

Section C—Dealing with and Understanding Youth

The workshop course enables the graduate student to devote his time to an educational topic or school problem of current interest to him and to secure the help of the staff, fellow students, and college facilities in pursuing this study. Members of the workshop may meet together to discuss matters of common concern in respect to the current school situation. In addition, the student works independently on his own subject and at times meets with a small group interested in the same area.

In the past, students have worked on topics in such areas as these: problems in administration, guidance programs, extra-curricular activities, school philosophies, problems in supervision, curriculum planning, and community relations. The success of the workshop depends

much upon the student knowing what he wants to accomplish in six weeks, the procedure being flexible enough to support his purposes. He must have his proposed problems for study approved by the Director of the Workshop before he enrolls for the course.

The workshop is offered only in the summer session. It is divided into three sections, as noted above. The student may enroll for four semester hours of credit or for two, the four calling for two periods of scheduled time in the course daily, the two calling for one period of scheduled time in the course. The student taking the course for two credits enrolls for one of the three fields: A—administration, B—supervision, or C—guidance. The student taking it for four credits may do all the work in one of these three fields, or he may enroll for two hours credit in one and two in another.

Credit: 2 or 4 semester-hours

EDUCATION 602. *Seminar in Guidance*

This course is designed to provide a laboratory situation for the exploration and study of the present practices with respect to the three major phases of the guidance program. Usually this seminar is given in conjunction with either Vocational (EDUCATION 535), Educational (EDUCATION 536), or Social-Moral (EDUCATION 537) Guidance. The major portion of the time is spent on field trips, in private investigation, and in research.

Prerequisites: EDUCATION 551, and previously or concurrently the related courses listed above.

Credit: 4 semester-hours

EDUCATION 603. *Principles and Practices of Research*

The purpose of this course is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course the student selects a problem and begins the research which will be completed the second semester.

Prerequisite: MATHEMATICS 400 or equivalent

Credit: 4 semester-hours

SENIOR-GRADUATE COURSES

Most of the following courses are set up to serve graduate students as well as College seniors. To carry graduate credit, the course in question must be approved by the candidate's adviser. In all instances, EDUCATION 406, EDUCATION 409, and EDUCATION 410 will be accepted as work for either of the two graduate degrees in this department. For a more complete description of these courses see the undergraduate catalog.

EDUCATION 401. *The Development of Educational Thought*

The purpose of this course is to acquaint the student with the three major philosophical traditions of idealism, realism, pragmatism, and their educational implications, in order that he may begin to formulate his own philosophy of education. These three traditions are studied in their historical and contemporary contexts through text and primary source readings.

Credit: 3 semester-hours

EDUCATION 405. *Teaching the Block-of-Time Program in the Secondary School*

Following a study of the philosophical and psychological bases of the block-of-time program, major emphasis is placed on the methodological problems involved in teaching the program and the development of resource units for use at different levels.

This course is open only to those students who have a major-minor combination of English and social studies.

Credit: 3 semester-hours

EDUCATION 406. *Educational Sociology*

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered.

Credit: 2 semester-hours

EDUCATION 407A. *Television in Education Workshop: Programming and Production*

This is a laboratory course designed to develop the techniques, methods, standards, procedures, and criteria pertaining to the special place of television in education. Through the utilization of studio equipment together with the resources of all the academic departments of the college, student potentialities, campus life, and the community,

students receive experience in planning, developing, and producing, television programs of educational value. Actual training is given in the use of standard television equipment on campus, and field trips are made to local television laboratories and studios.

Credit: 2 semester-hours

EDUCATION 407B. *Television in Education Workshop: Classroom Utilization*

This course is designed to give training in the following areas of television education: types of programs best suited for classroom use; practical applications of programs emanating from commercial stations; various subject areas in which television might be used such as language, science, art, social studies, etc.; script writing; co-ordination of program and school schedules; and the possible use of educational television stations and how they best serve surrounding communities. Students are also introduced to the operation of both sending and receiving television equipment so that they may understand program possibilities and limitations.

Credit: 2 semester-hours

EDUCATION 408. *Selection and Utilization of Audio-Visual Materials*

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed.

Credit: 2 semester-hours

EDUCATION 409. *Radio and Sound Equipment in the Classroom*

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered.

Credit: 2 semester-hours

EDUCATION 410. *Teaching Materials Workshop*

This course is for those persons who wish to study advanced problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects.

Credit: 2 semester-hours

EDUCATION 411. *Educational Motion-Pictures Workshop*

This course includes various phases of the planning and production of educational motion pictures. Students receive actual experience in scenario writing, costume research, set designing, lighting, photography, editing, and sound recording. During the course an educational film is produced as a class project.

Credit: 2 semester-hours

EDUCATION 420A and 420B. *The Community Centered School*

This course deals with the development and functions of the school as a community resource. Students assemble and interpret data relating to actual school and neighborhood situations. Consideration is given to the social framework in which the school operates; racial and national minorities; intercultural education; truancy and delinquency; and the discovery and utilization of community resources. The use of school personnel and facilities to deal with racial problems is treated in light of the data assembled.

Credit: 4 semester-hours

EDUCATION 421A and 421B. *Leadership of Activities and Services in Community Education*

This course is designed to prepare teachers and others to give leadership to community-education activities. Starting with the assumption that the school should serve as a community center, members of the course proceed to learn about the various activities and programs that can be initiated and carried on by the school. Consideration is given to programming, utilization of space and personnel, and care of equipment. Techniques for organizing and directing special programs such as scouting, folk dancing, crafts, field trips, production of films, forums and debates, etc., are included.

Credit: 4 semester-hours

EDUCATION 422A and 422B. *The Organization, Administration, and Supervision of Programs in Community Education*

This is a workshop type of course which emphasizes the integration of school, social, recreational, and adult education programs. The course presents a survey of current trends in community education as adopted and implemented by boards of education throughout the country. Principles, policies, practices, and problems related to the administration and supervision of community-education programs are surveyed. The following types of programs are considered: summer playgrounds, day camps, after-school centers, evening centers, youth and adult recreation centers.

Credit: 4 semester-hours

EDUCATION 430. *Techniques for Improving Reading Abilities*

This course deals with the diagnosis and remedial treatment of difficulties in reading. A study is made of the basic principles underlying desirable reading experiences and their application in guiding children to success in learning to read adequately.

Credit: 2 semester-hours

EDUCATION 440. *Camping and Outdoor Education*

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation.

When given through the Part-Time Division of the College, a week-end experience at the New Jersey State School of Conservation in the Stokes State Forest is required for credit in this course.

Credit: 2 semester-hours

EDUCATION 441. *Conservation Education*

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these resources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

Credit: 2 semester-hours

EDUCATION 442. *Practicum in Camp Leadership*

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation.

Credit: 2 semester-hours

EDUCATION 444. *Practicum in Conservation Education*

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Par-

participation in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion.

Prerequisite: EDUCATION 441, *Conservation Education*, or SCIENCE 412, *Field Studies in Science: Biological*, or SCIENCE 413, *Field Studies in Science: Physical*, or the equivalent

Credit: 2 semester-hours

EDUCATION 450. *Psychological Foundations of Personality*

This course is concerned with the physical, mental, and cultural bases underlying the formation of the personality of the individual. Emphasis is placed upon the implications for the teacher in developing understanding of the formation and measurement of personality.

Credit: 2 semester-hours

EDUCATION 451. *Guidance for the Classroom Teacher*

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what it is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor.

Credit: 3 semester-hours

EDUCATION E460. *Public School Program of Studies*

This title is given to a group of courses designed to meet requests from public school systems desiring help in curriculum reconstruction. Each of the parts of this general course will be given on a cooperative inter-college basis, and taught by specialists in the various fields selected from the faculties of the cooperating State Colleges. Certificates of credit will be issued by the college sponsoring the work.

- Part I. 460A—Principles of Curriculum Revision
- Part II. 460B—Workshop in Curriculum Revision
- Part III. 460C—Organization and Evaluation of Curricula
- Part IV. 460D—The Social Studies Program of Studies
- Part V. 460E—The Language Arts Program of Studies
- Part VI. 460F—The Science Program of Studies
- Part VII. 460G—Workshop in Materials and Methods of Science Education
- Part VIII. 460H—The Mathematics Program of Studies

These cooperative inter-college courses are provided only when the requests from the public school authorities of the county, municipality,

or community are such as to require their use. No undergraduate may elect this course unless he is actively engaged in teaching. Not more than six semester-hours in these courses may apply on a graduate degree at the Montclair State College.

Credit for each part: 2 semester-hours

EDUCATION E460I. *Public School Program of Studies*

Part IX. Testing and Evaluation in Instructional Program

This course is a part of a group of courses designed to meet requests from public school systems desiring help in curriculum reconstruction and in up-grading of teacher personnel. The course is given as a workshop dealing with testing, test construction, evaluation of students, and evaluation of test results on teacher-prepared tests. Practical classroom tests and actual teaching situations are considered.

Credit: 2 semester-hours

EDUCATION 461. *The Junior High School Curriculum*

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are the topics covered in this course. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

Credit: 2 semester-hours

EDUCATION 480. *Field Science for Elementary Teachers*

Working in a natural setting, rather than an artificial laboratory, this course stresses firsthand experience with natural phenomena and suggests what can be done to convey an understanding of these things to the elementary-school student. In developing an understanding of natural resources consideration is given to such areas as rocks and minerals, plant and animal life, astronomy, weather, and all outdoor phenomena, both physical and biological. If desired, collections are made under supervision, and some latitude is provided for individual specialization in some phase of field science. The student needs no formal scientific background for this course. Methods of teaching on the elementary-school level as well as subject-matter content are included. Simple demonstrations, experiments, collections, acquisition of free and inexpensive materials, reference publications, and the most recent methods and trends in field-trip procedure are considered.

Credit: 2 semester-hours

EDUCATION 491. *Measurement and Evaluation in Teaching and Learning*

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas and in appraising, marking, and reporting pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles test scores, and interprets test data.

Credit: 3 semester-hours

ELEMENTARY EDUCATION COURSES

Although Montclair State College is engaged primarily in preparing secondary school teachers, during the present shortage of teachers in the elementary schools it is deemed expedient to offer courses in the field of elementary education for the undergraduates and graduates of this college leading toward certification to teach in the elementary school.

THE DEPARTMENT OF ENGLISH

Graduate study in the Department of English is designed :

1. To broaden the understanding and appreciation of the culture of the Western World through extended study of the literature of Great Britain and the United States, of those European nations which have contributed so much to our American heritage, and of those Oriental nations now exerting an increasing influence upon the modern world.
2. To examine the function of English language communication in the modern world through study of its historical development, its psychological nature, its critical expression, and its practice in the language arts.
3. To enrich the professional background of English teachers through investigation of research and experimentation designed to improve instruction in English in the secondary school.

Requirements for Graduate Study in the English Department

The candidate for the Master's degree must present an undergraduate major of at least thirty semester-hours in English or complete the required number with prerequisite courses prescribed by the Chairman of the Department before matriculation.

Upon matriculation each candidate receives from the Chairman of the Department an approved course outline distributed as follows :

A. *Basic Professional Education* 6 semester-hours

These courses include a full year of research as prescribed in EDUCATION 503 and EDUCATION 603 or the equivalent of EDUCATION 603 in a departmental seminar such as ENGLISH 507, 516, 517, 519, or 541.

B. *Departmental Course Requirements*

I. American Literature Minimum requirements 4 semester-hours

To be selected from among ENGLISH 407, 525, 533, 537, 538, 540, 543, 545A, 545B, or 546.

II. English Literature Minimum requirements 6 semester-hours

To be selected from among ENGLISH 402, 404, 407, 420, 421, 502, 503, 505, 506, 515, 518, 521, 531, 532, 535, 540, 544A, 544B, or 546.

III. World Literature Minimum requirements
4 semester-hours

To be selected from among ENGLISH 432, 451, 459, 513, 514, 520A, 520B, 524, 528, 530, 534, 536, 539, or 548.

IV. Language Communication Minimum requirements
4 semester-hours

a. Language Study

To be selected from among ENGLISH 408, 419, 511, 512, or 516.

*b. Reading Improvement

To be selected from among ENGLISH 430, 547, EDUCATION 430, EDUCATION 530A, EDUCATION 530B, or EDUCATION 532.

*c. Speech

To be selected from among SPEECH 410, 417, 435, 448, 449, 454, 456, 457, 461A, 461B, 462, 463, 464, 466, 467, 468, or 522.

C. *Electives* 8 semester-hours

In meeting this requirement the Department urges candidates for the Master's degree to explore the offerings in other departments and select as widely as possible in those areas not represented in undergraduate study. Such electives help the candidate to achieve the first purpose of graduate study in the Department, "to broaden appreciation of the culture of the Western World."

TOTAL SEMESTER-HOURS REQUIRED FOR THE A.M. DEGREE
IN ENGLISH 32

D. *Department Examination or Master's Thesis*

If the candidate chooses to develop a thesis following research in EDUCATION 503 and 603, a departmental sponsor will be appointed as proposed in the "Report of a Sub-Committee of the Graduate Council" on January 5, 1955, and the "Regulations of Research and Thesis Requirements" will be followed in the completion and acceptance of the thesis.

Otherwise, each candidate must pass a written comprehensive examination before the degree is awarded. A part of this examination is a brief oral examination conducted by members of the Graduate Faculty of the Department. The Chairman of the Department announces to the Registrar as well as to members of the Department the dates of the examination which will be given in April and July of each calendar year and will provide candidates with the information desired to prepare for it.

* A course in reading improvement or speech may be offered as two of the semester-hours required in the area of language communication.

GRADUATE COURSES

ENGLISH 502. *Victorian Poetry*

The most important English poets who wrote during the transition from the Victorian to the modern period are read and discussed. An important feature of the course is the analysis and appreciative reading of the lyric poetry of Rossetti, Swinburne, Hardy, Bridges, G. M. Hopkins, Francis Thompson, A. E. Housman, Kipling, and W. B. Yeats.

Credit: 2 semester-hours

ENGLISH 503. *Geoffrey Chaucer and His Times*

Some of the works of Chaucer are read rapidly, others studied intensively, so that the students may acquire a broad general understanding of Chaucer's place in the history of English literature as well as facility in reading and interpreting the medieval text of his stories.

Credit: 2 semester-hours

ENGLISH 505. *Philosophy and British Poetry of the Nineteenth Century*

This course is designed to show the mutual interrelations between currents of philosophic thinking and their influence in selected writings of major poets from Wordsworth to Matthew Arnold.

Credit: 2 semester-hours

ENGLISH 506. *John Milton*

This course has for its primary aim the understanding and evaluation of Milton's poetry. Contributory to this end are the following topics: the Puritan struggle for civil and religious liberty; the growth of science in the Seventeenth Century; the life, personality, and prose writings of Milton; his literary heritage and influence; comparison of Milton with the Cavalier Metaphysical poets.

Credit: 2 semester-hours

ENGLISH 507. *Critical Writing*

This course evolves a body of critical principles for judging art and literature, and provides training in the writing of criticism, ranging from comments upon pupils' themes to a full and comprehensive essay upon the work of some outstanding author. The course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 511. *The History of Literary Criticism*

The purpose of this course is to familiarize the student with the chief doctrines of the great critics from Aristotle to I. A. Richards and T. S. Eliot and to correlate these critical doctrines with the outstanding writings of each age. By such a study it is possible for the student to evaluate the historical interrelations of expert criticism and literary production. A basic text is used, but much of the information is gleaned from source materials.

Credit: 2 semester-hours

ENGLISH 512. *The Growth and Structure of the English Language*

This course is designed to help the high school teacher understand the structure of modern English, one of the most complicated of contemporary tongues. Through an analysis of the historical evolution of our language, the student discovers the reasons for many of the seemingly illogical and arbitrary characteristics of modern English spelling, grammar, and morphology.

Credit: 2 semester-hours

ENGLISH 513. *The Renaissance*

This course deals with Petrarch and the humanists; Boccaccio and the *Novelle*; the House of the Medici, Savonarola, the Popes; Machiavelli and *The Prince*; Cellini and the *Autobiography*; Castiglione and *The Courtier*; Boiardo, Pulci, Ariosto, and the romantic epic; the drama; the art of Da Vinci, Botticelli, Michelangelo, Raphael, Titian, and others; Rabelais and the *Gargantua and Pantagruel*; Cervantes and *Don Quixote*; Ronsard and the French *Pleiade*.

Credit: 2 semester-hours

ENGLISH 514. *Origin and Development of the Arthurian Legend*

This course deals with the vague and tentative beginnings of the Arthur story in early chronicle and legend; with Geoffrey of Monmouth's pseudo-historical and Chretien de Troyes's romantic treatments; with the great medieval recapitulations of Gottfried von Strassburg, Wolfram von Eschenbach, and Sir Thomas Malory; with the Victorian retellings of Tennyson, Arnold, and Morris; with the musical adaptations of Wagner; and with the modern versions of E. A. Robinson. It includes a detailed history of the development of the legend in its divers forms.

Credit: 2 semester-hours

ENGLISH 515. *Robert Browning*

Browning's characteristic shorter poems are recalled or studied in order to define his fundamental ideas as a writer. This is followed by a study of his longer poems and dramas: the "soul-studies",

Pauline, *Paracelsus* and *Sordello*; the dramas, *Strafford*, *Pippa Passes*, *A Blot in the 'Scutcheon*, *Colombe's Birthday*, and *In a Balcony*; the translations, *The Agamemnon of Aeschylus*, and *Balaustion's Adventure*; and Browning's masterpiece, *The Ring and the Book*. These works are studied for their literary and philosophical values, as showing the development of Browning as man, poet, and philosopher, and as a reflection of certain phases of Nineteenth-Century life and thought.

Credit: 2 semester-hours

ENGLISH 516. *Language Problems in the English Curriculum*

This course reviews the several theories of language and studies the problem of meaning in order to arrive at a suitable technique for the interpretation of prose and verse. This technique is then applied to the problems of reading, of composition, of speech, and of appreciation of literature. The course has two aims: to increase the student's own skill in dealing with language, and to increase his effectiveness in teaching. The course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 517. *Recent Research and Experiment in the Teaching of English*

This course analyzes and evaluates current research in the fields of language, literature, and composition relevant to the teaching of English in the high school, and examines critically recent experimentation in methods of teaching English. The aim of the course is to make available to the student any recent knowledge and experience which may throw light on the problems of English teaching in secondary schools and to evaluate tendencies in this field. The course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 518. *The Major Romantic Poets*

This course studies the work of Coleridge, Wordsworth, Scott, Byron, Shelley, and Keats. It devotes especial attention to the poems which are best adapted for the reading of high school students.

Credit: 2 semester-hours

ENGLISH 519. *English in the Modern High School*

This is a seminar in which the methods and materials requisite to the development of a program in the language arts (listening, speaking, reading, and writing) are considered.

Credit: 2 semester-hours

ENGLISH 520A and 520B. *Great Books on Education*

Students examine the classics dealing with educational theory and practice which they so often read about but rarely consult: Plato's *Republic*, Xenophon's *Cyropaedia*, Cicero's *De Oratore*, Castiglione's *The Courtier*, Machiavelli's *Prince*, Rabelais's *Abbey of Theleme*, Ascham's *Schoolmaster*, Bacon's *Novum Organum*, Defoe's *Projects*, Milton's *To Samuel Hartlib on Education*, Rousseau's *Emile*, Byron's *Don Juan*, Hughes' *Tom Brown's Schooldays*, Newman's *Idea of a University*, the Arnold-Huxley debates, and the works of John Dewey and Jacques Barzun. This course is recommended for graduate students in the Department of Education.

Part A—Plato to Rousseau.

Part B—Rousseau to Dewey.

Credit: 2 semester-hours each

ENGLISH 521. *English Literature of Social Problems*

This course surveys English literature from 1800 to 1914, and the principal authors discussed include Shelley, Dickens, Kingsley, Tennyson, Carlyle, Butler, Meredith, Galsworthy, Bennett, Shaw, and Wells.

Credit: 2 semester-hours

ENGLISH 524. *Five Great Books*

The aim of this course is to broaden and to deepen the student's general cultural perspective by a study of five books which have profoundly influenced present civilization. The actual choice of texts is a cooperative class enterprise. Selections are made from such books as: *The Bible*, Homer's *Odyssey*, Plato's *Republic*, Shakespeare's *Hamlet*, Rousseau's *Confessions*, Goethe's *Faust*, Tolstoy's *War and Peace*, Dewey's *The School and Society*. This course is designed to provide leadership in local "Great Books" meetings.

Credit: 2 semester-hours

ENGLISH 525. *The Development of the American Novel*

The American novel as a contemporary art form is examined in this course. Beginning with the novels of the early Nineteenth Century the course traces the rise and development of the Romantic and the Realistic novel and concludes with an example of American Naturalism. Written criticism of five novels is required.

Credit: 2 semester-hours

ENGLISH 528. *New Perspectives in World Literature*

The point of view of our own democratic culture is surveyed and established in an attempt to see how the literatures of Western Europe, the Middle East, and the Orient have influenced and are influencing modern thinking. Such perspectives are designed to provide adequacy in teaching a world point of view through literature.

Credit: 2 semester-hours

ENGLISH 530. *Dante and His Influence in England and America*

Fully two-thirds of the time of this course is devoted to rereading and reassessment of Dante himself in English translation. When Dante's meaning has been revealed, his continued influence from Chaucer through Sackville, Spenser, and Milton to Rossetti, Longfellow, and T. S. Eliot becomes the subject of investigation.

Credit: 2 semester-hours

ENGLISH 531. *Seventeenth Century Literature*

This course aims to give students an appreciation of the prose style and intellectual content of the best thinkers and writers of the first "modern" century—Bacon, Burton, Walton, Bunyan, Hobbes, Pepys, Dryden; and of the poetic art of Donne and the "Metaphysicals"—Jonson, Herrick, and the "Cavaliers"—Herbert, Cowley, Vaughan, and others.

Credit: 2 semester-hours

ENGLISH 532. *The Victorian Novel*

This is an intensive study of the novel in Victorian England. A review of the development of the English novel before this period is followed by studies in the works of Dickens, Thackeray, Austen, Eliot, Trollope, Meredith, and Hardy. Novels studied in the high school are treated professionally in class.

Credit: 2 semester-hours

ENGLISH 533. *Masters of American Literature*

Significant American writers, including Irving, Hawthorne, Poe, Emerson, Melville, Whitman, and Mark Twain, are studied to discover their contributions to American life and to reveal important forces in our national background.

Credit: 2 semester-hours

ENGLISH 534. *Medieval Epic, Saga, and Romance*

This course deals with the chief medieval epics, sagas, and romances from the literature of England, France, Germany, Ireland, Iceland, Wales, and Italy in modern English translation. Attention is given both to those narratives which reflect the life of a particular country and to those which are international and express more generally the spirit of medieval Europe.

Credit: 2 semester-hours

ENGLISH 535. *Eighteenth Century Literature*

Major essayists, poets, dramatists, novelists, and letter writers are read and evaluated in terms of the thought, life, and literary movements of their own time and of their significance for the present generation. Authors studied include Addison, Steele, Defoe, Swift, Goldsmith, Sheridan, Gray, Johnson, Boswell, Cowper, Richardson, Fielding, Sterne, Smollett, and Burke. High-school classics receive special attention.

Credit: 2 semester-hours

ENGLISH 536. *Philosophy of Great Literature*

By studying one or two masterpieces in a given semester this course aims to help the student develop a plan of study to achieve a systematic understanding of the philosophic world-views and life-views implicit in such works as: Aeschylus's trilogy, *The Oresteia*; Plato's *Timæus*; Boethius's *Consolations of Philosophy*; Dante's *Divine Comedy*; Shakespeare's *Hamlet*; Milton's *Paradise Lost*; Pascal's *Pensées*; Goethe's *Faust*; Blake's *The Marriage of Heaven and Hell*; Dostoevski's *Brothers Karamazov*; Mann's *The Magic Mountain*; Hesse's *Demian*; Henry Adams's *Mont St. Michel and Chartres*; the *Bhagavad-Gita*; Lao-tse's *The Book of Tao*; and Auden's *Collected Poetry*.

Credit: 2 semester-hours

ENGLISH 537. *American Drama in American Democracy*

This course uses plays produced upon the American stage to illustrate the development of democratic concepts from Colonial Days to the contemporary theatre.

Credit: 2 semester-hours

ENGLISH 538. *American Literature of Social Problems*

This course surveys the American literature which presents social problems during the period from 1800 to 1914 in an attempt to discover the attitudes of the various authors toward these problems. The works of such authors as Cooper, Lowell, Thoreau, Whitman,

Howells, Bellamy, Garland, and Glasgow are studied from this point of view. Enough of the social background of the period is discussed to give the necessary perspective for the discussion of the literature, but the emphasis is placed on the reflection of the problems in literature and not merely on the problems themselves.

Credit: 2 semester-hours

ENGLISH 539. *Theatre and Society*

Dramatic expression from the time of the ancient Greeks to the present is studied carefully to analyze social, political, and ethical trends as they are reflected in the drama. The members of the course prepare analyses of social trends in contemporary drama. This research provides the basis for reports given during the latter part of the course.

Prerequisite: ENGLISH 102 or its equivalent

Credit: 2 semester-hours

ENGLISH 540. *The Modern Novel*

Emphasis is given to British and American novels since 1870, and the important tendencies of present-day prose fiction are explored. Students are taught how to read a novel with profit, and how to guide and direct the reading of others.

Credit: 2 semester-hours

ENGLISH 541. *The Teaching and Appreciation of Poetry*

This course is both personal and professional. It develops the student's appreciation of poetry as an expression of life and as a form of art, and it considers in detail the aims and methods of teaching poetry. This course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 543. *Contemporary American Literature*

This course studies the major authors and literary movements in America during the contemporary period. Beginning where the course in *Masters of American Literature* normally ends, it is designed to complete a unit in this subject.

Credit: 2 semester-hours

ENGLISH 544A and 544B. *Shakespeare*

This course, in two parts, presents all of Shakespeare's plays as opposed to those taught only in high school, which is the chief concern of ENGLISH 301B. Here the poet's full development can be seen, providing a complete critical experience. Critical analysis, contentual evaluation, and textual problems are the main areas of concern. Part A deals with the tragedies; Part B, the comedies. The chronicle plays are woven into the discussion.

Credit: 2 semester-hours

ENGLISH 545A and 545B. *American Literature*

This chronological survey reflects the interplay of life and letters in the American scene, examining the political, social, and ethical motivations of the great movements in literature, and reading the separate works in the light of the influences that brought them into being. Part A commences with the Puritan Tradition and ends just as the Civil War is beginning. Part B traces, in life and in literature, the growth of the great democratic tradition in America.

Credit: 2 semester-hours

ENGLISH 546. *Modern Drama*

An historical survey of trends, dramatists, plays, and accomplishments from Ibsen to the latest prize plays on Broadway provides background for this course. An examination of the structure and content of plays to determine what constitutes a good play stimulates appreciation. Students are encouraged to read widely and to see current productions on Broadway.

Credit: 2 semester-hours

ENGLISH 547. *Reading Interests of High School Students*

Through wide reading, study and preparation of bibliographies, and establishing criteria for judging current books, the student is prepared to guide the recreational reading of junior and senior high-school students.

Credit: 2 semester-hours

ENGLISH 548. *Fiction as an Image of World History*

This course presents a sequence of historical and cultural novels which aims to present insight into the eras of man's history from pre-historic to present time. Among novels read are: Jensen, *The Long Journey*; Mann, *Joseph and His Brothers*; Yourcenas, *Hadrian's Memoirs*; Merejowski, *The Romance of Leonardo da Vinci*; Reade, *The Cloister and the Hearth*; and Manzoni, *The Betrothed*.

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

For more complete descriptions of these courses see the undergraduate catalog.

ENGLISH 402. *Survey of British Literature to 1798*

This course draws together into a systematic narrative the story of the development of English literature from the beginnings to the romantic triumph of 1798.

Credit: 3 semester-hours

ENGLISH 404. *Survey of British Literature*

This course is a continuation of ENGLISH 402. It takes up the story with the romantic triumph in 1798 and continues it to the present time.

Credit: 2 semester-hours

ENGLISH 407. *British and American Biography*

Both the old and new types of biography are read and studied in this course, with emphasis upon the Nineteenth and Twentieth centuries.

Credit: 2 semester-hours

ENGLISH 408. *Creative Writing*

Students in this course attempt seriously the standard literary forms in prose and verse.

Credit: 2 semester-hours

ENGLISH 413. *Modern Poetry.*

This course deals with the work of contemporary poets, both British and American. Much of the best modern poetry is studied for interpretation and appreciation. The distinctive poetry "movements" that have occurred during the present century are examined as expressions of changing social and artistic ideals. Critical appreciation of poetry is developed through comparison of the diverse styles, themes, and poetic theories present in modern poetry.

Credit: 2 semester-hours

ENGLISH 419. *Grammar for Teachers*

This course is a study of the basic facts of grammatical relationships in English, and of the current problems of "rules" as opposed to "usage." The primary aim of the course is to acquaint students with the true function of grammar in speech and writing.

Credit: 2 semester-hours

ENGLISH 420. *High School Classics*

This course is a seminar for prospective student teachers on the problem of teaching literature in high schools. The student reads numerous articles on the "classics" vs. the "moderns" controversy, becomes thoroughly acquainted with the contents and aims of the best high school anthologies currently in use, and builds up a working philosophy for his own teaching. Through the continued practice of reporting and discussion leading, the student is enabled to integrate his total experience in college.

Credit: 2 semester-hours

ENGLISH 421. *The Short Story*

This course traces the history of the short story as an evolving literary form, emphasizing the productions of the Nineteenth and Twentieth centuries.

Credit: 2 semester-hours

ENGLISH 428. *The Film and Society*

This course considers the impact of the motion picture on our culture. The film is studied and evaluated as a powerful social and educative force, as an art form, and as an entertainment medium. The origin and development of film techniques are treated, and films are shown at each session, accompanied by analysis and discussion. The scenario as a literary type and the adaptation of prose fiction for film purposes are included in the course content. A laboratory fee of \$5.00 to cover the cost of film rentals accompanies this course.

Credit: 2 semester-hours

ENGLISH 430. *Reading in Secondary Schools*

After examination of recent research concerning reading activities at various age levels, the class examines and evaluates methods devised to develop reading skills, to increase vocabularies, and to improve the comprehension of secondary school students.

Credit: 2 semester-hours

ENGLISH 432. *The Development of the Drama*

The development of the drama is studied in all periods from ancient Greece and Rome through the Middle Ages and the Renaissance to the beginning of modern drama with Ibsen. The emphasis of the course is placed on the major characteristics of the drama and its necessary complement, the theatre. Representative plays are read and discussed.

Credit: 2 semester-hours

ENGLISH 446. *The One-Act Play*

This course studies the one-act play as an art form, devoting special attention to plays which are suitable for high school production.

Credit: 2 semester-hours

ENGLISH 451. *Literature and Art in Western Culture*

This course deals with the nature of literature and considers its importance as a factor in the development of international understanding. It deals with the relation between the use of language in literature and with the methods of art, since the re-creation of experience is a function common to both. Through reading the literature which is being read by our neighbors today, both in Europe and in the Western Hemisphere, students are able to participate in a common experience with them.

Credit: 2 semester-hours

ENGLISH 459. *A Survey of Great Chinese Literature*

Some of the contributions which have gone into the making of Chinese literature, such as the *Book of Odes* of Confucius, the poems of Li Po and Tu Fu, the Lute Song, and the Dream of the Red Chamber, are considered in this course. Aside from a general survey of the great literature of China special attention is given to English translations of the masterpieces of Chinese literature. There are twenty-four hours of lectures in the morning; after lunch each day a period of forty-five minutes is devoted to informal talks, story-telling, singing of Chinese songs, and showing of motion pictures. During the workshop period individual students work on specific topics under the guidance of the instructor.

Prerequisite: SOCIAL STUDIES 499—*Introduction to Chinese Culture*

Credit: 3 semester-hours

DEPARTMENT OF FOREIGN LANGUAGES

In answer to the growing demand for graduate work, the Foreign Language Department offers a program based on STUDY ABROAD. Through personal contact and experience, the student, thus, can increase both his knowledge and understanding in respect to the people whose language he is preparing to teach. This means that the student will do part of his graduate work at a selected college in a country where the language of his major is spoken. To assist with this program of STUDY ABROAD, the Foreign Language Department yearly offers scholarships for qualifying applicants. These scholarships are sustained by a Student Exchange Fund. Students who are interested in obtaining a STUDY ABROAD scholarship should consult with the Chairman of the Department for particulars. This program is open only to graduates of Montclair State College. Sixteen semester-hours of graduate credit are granted for this work. The remaining sixteen hours necessary for the Master's degree are to be selected from graduate courses offered at Montclair. There is also required a final comprehensive examination in the student's major field and a thesis developed from the study and residence in the year abroad. The thesis will be credited as part of the sixteen semester-hours total allowed for the work in the foreign country. The following plan outlines the work for a Master's degree in the Department of Foreign Languages:

<i>Required Courses</i>		<i>Credits</i>
French 502	<i>Study Abroad</i>	16 semester-hours
or		
Spanish 502	<i>Study Abroad</i>	16 semester-hours
Education 503	<i>Methods and Instruments of Research</i>	2 semester-hours
<i>Electives</i> (To be selected in consultation with the Chairman of the Foreign Language Department)		
Education courses		4 semester-hours
Graduate courses in other departments of the college		10 semester-hours
Total		32 semester-hours

Final comprehensive examination in major field of foreign language.

FRENCH 502. *Study Abroad*

Credit: 16 semester-hours

SPANISH 502. *Study Abroad*

Credit: 16 semester-hours

DEPARTMENT OF INDUSTRIAL ARTS EDUCATION

Graduate work in the Department of Industrial Arts Education is designed to help teachers of industrial arts (1) to become more proficient in teaching through study of recent trends and new developments in the field, (2) to improve organization of the industrial arts laboratory, and (3) to provide a basis for work in supervision and administration. Advanced work in industrial arts and related areas which will meet needs and broaden professional experiences of industrial arts teachers is emphasized.

An undergraduate major as established by the State Board of Education is a prerequisite for matriculation as a candidate for the degree. Individuals who have an undergraduate major in this area, but who do not wish to work toward a degree, may enroll in graduate courses in the department with the consent of the adviser.

GRADUATE PROGRAM OF STUDIES

MASTER OF ARTS DEGREE IN INDUSTRIAL ARTS
EDUCATIONI. *Basic Professional Course Requirements* S. H.

A. Ed. 503. *Methods and Instruments of Research* 2
(Math. 400, *Educational Statistics*, is a prerequisite for Ed. 503.)

B. Each student with the approval of his adviser selects four more semester-hours of education credit. 4
(Two 500-level courses for two semester-hours each—preferably in the areas of administration, curriculum, guidance, or supervision.)

Total 6

II. *Industrial Arts Requirements*

Each student with the approval of his adviser will select eighteen semester-hours of departmental work to be selected from among the following:

Ind. Arts 501. *Curriculum Construction and Course Organization in Industrial Arts Education*—3 s. hrs.

Ind. Arts 502. *Shop Planning and Equipment Selection in Industrial Arts Education*—3 s. hrs.

Ind. Arts 503. *Problems in Teaching Industrial Arts*—3 s. hrs.

Ind. Arts 504. *Research and Experimentation in Industrial Arts Education*—3 s. hrs.

Ind. Arts 505. *History of Industrial Arts Education*—3 s. hrs.

Ind. Arts 506. *Vocational Education in New Jersey*—3 s. hrs.

Ind. Arts 511. *Supervision of Industrial Arts*—3 s. hrs.

Ind. Arts 601. *Seminar in Industrial Arts Problem Solving Approach to Teaching*—3 s. hrs.

Total 18

If the candidate chooses to develop a thesis, creative project, or field study following research in EDUCATION 503 and 603B, a departmental sponsor will be appointed. The "Regulations of Research and Thesis Requirements" will be followed in the completion and acceptance of the thesis. Credit for such a project will be in the extent of four semester-hours.

III. *Electives*

The candidate may select, after consultation with the adviser, courses that will round out his background. Candidates are urged to explore the offerings in other departments and select as widely as possible in those areas not represented in undergraduate study.

Total 8

Thesis

Each candidate who does not choose to develop a thesis, creative project, or field study, must pass a written comprehensive examination before the degree is awarded. The examination will be given during the spring semester each year. Students desiring to take the examination should notify the department prior to the beginning of the spring semester. They will then be notified of the date and provided with general information pertaining to the examination.

Grand Total 32

GRADUATE COURSES

INDUSTRIAL ARTS 501. *Curriculum Construction and Course Organization in Industrial Arts Education*

This course presents a study of curriculum construction techniques used in developing a program of industrial arts. How to make a course of study and how to develop instructional materials are given special attention. The evaluation of pupil progress based on tests and other evaluative criteria are studied.

Credit: 3 semester-hours

INDUSTRIAL ARTS 502. *Shop Planning and Equipment Selection in Industrial Arts Education*

This is a lecture and laboratory course organized to give basic understanding of the principles of planning a modern laboratory and equipping it. A study is made of standards, and actual practice is given in laying out floor plans, selecting and placing equipment, and studying architectural aspects of a functional building.

Credit: 3 semester-hours

INDUSTRIAL ARTS 503. *Problems in Teaching Industrial Arts*

Problem solving techniques are studied and used in aiding individuals to solve problems which they have encountered in their teaching of industrial arts. Individual and group reports are discussed and analyzed.

Credit: 3 semester-hours

INDUSTRIAL ARTS 504. *Research and Experimentation in Industrial Arts Education*

Each individual is required to plan an experimental project, select the needed materials, organize the procedure, construct the necessary equipment, conduct the experiment, and record the findings.

It is recommended that a minimum of four semester-hours of credit, selected in consultation with the adviser, be taken as a prerequisite to this course.

Credit: 3 semester-hours

INDUSTRIAL ARTS 505. *History of Industrial Arts Education*

This course presents the history and development of industrial arts education as well as the contributions of leaders and their efforts to develop a program to meet the needs of individuals for their time. Individual and group study methods are used in tracing the development from its inception to the present time.

Credit: 3 semester-hours

INDUSTRIAL ARTS 506. *Vocational Education in New Jersey*

The industrial development of the United States is studied as a background for the development of vocational schools. Emphasis is placed on trade, industrial, and distributive education programs in New Jersey, State and Federal legislation, teacher training, and occupational efficiency resulting from the program.

Credit: 3 semester-hours

INDUSTRIAL ARTS 511. *Supervision of Industrial Arts*

This course presents a study of administrative principles and practices found in the modern laboratory. Special attention is given to the methods used to upgrade in-service teachers, the place of industrial arts in general education, requisitioning supplies, budgeting, distributing supplies, and techniques used in supervising the program.

It is recommended that a minimum of four semester-hours of credit, selected in consultation with the adviser, be taken as a prerequisite to this course.

Credit: 3 semester-hours

INDUSTRIAL ARTS 601. *Seminar in Industrial Arts Problem Solving Approach to Teaching*

Students desiring to evolve the problem-solving approach to teaching, for use in their own industrial-arts laboratories, have the opportunity to structure and develop the necessary techniques and materials. The work is conducted under seminar and individual guidance. The hours for the seminars and conferences are, therefore, arranged between the student and the instructor.

Credit: 3 semester-hours

SENIOR-GRADUATE COURSES

The following courses are not required for the Master's degree in Industrial Arts Education. With the approval of the Chairman of the Department, they may be used as elective credits.

INDUSTRIAL ARTS 401. *Comprehensive General Shop for Elementary and Junior High Schools*

Laboratory experiences are organized according to the principles and philosophy of a general shop at the kindergarten, elementary, and junior high school levels. Each student has the opportunity to plan a laboratory program entailing as many of the areas as needed to produce the type of program found at these levels in the public schools of New Jersey. All students are encouraged to gain experience at the kindergarten, elementary, and junior high school levels as consultants working with the classroom teachers of these levels. Students are encouraged to develop class units, group projects, and individual projects which are related to the lives of boys and girls in these grade classifications.

Credit: 4 semester-hours

INDUSTRIAL ARTS 402. *Comprehensive General Shop for Senior High School*

In this course laboratory experiences are organized under the principles and philosophy of a general shop at the high-school level. Students are encouraged to develop class units, group projects, and instructional materials, and to perfect or develop new technical skills appropriate for the high-school level.

Credit: 4 semester-hours

INDUSTRIAL ARTS 403. *Metal and Power, III*

The third experience in metal and power gives advanced work in these areas. The metal area includes activities in brazing, foundry, machine shop, low pressure welding, and mass production techniques. The power area involves experiences in auto mechanics, power mowers, outboard motors, diesels and other combustion engines, mechanical power, steam power, and hydraulics.

Credit: 4 semester-hours

INDUSTRIAL ARTS 406. *Industrial Arts Instructional Materials*

Laboratory and seminar experiences are organized to prepare courses of study, to write instructional materials, and to construct tests and other devices for evaluating the progress of pupils. Community resources are utilized to correlate them with the school experiences.

Visual aids are examined and constructed to solve specific teaching problems. Teaching techniques are strengthened through the application of demonstrations using various materials created. Various methods used in the requisition of tools, materials, and equipment are studied through theory and practical applications.

Credit: 4 semester-hours

INDUSTRIAL ARTS 442. *Conservation of Basic Industrial Materials*

In this course the students live for ten days at the New Jersey State School of Conservation, Stokes Forest. Study is devoted to the origin, development, use, and consumption of the basic industrial materials as they exist in their natural state. The materials studied include wood, plastics, leather, ores, petroleum, textiles, and steel. The course material is developed through the use of (1) field trips to the natural sources of supply and basic industries, (2) films concerning the materials and their use in industry, and (3) discussion periods with the specialists of industry and government officials who are responsible for conserving and using these materials.

Note: The fee for this course is \$55.00 which includes tuition, board, lodging, transportation on field trips, and use of recreational facilities.

Credit: 2 semester-hours

INDUSTRIAL ARTS 443. *The Use and Processing of Basic Industrial Materials by Modern Industry*

In this course the students live for ten days at the New Jersey State School of Conservation, Stokes State Forest. Study is devoted to the recognition, use, and processing of the basic industrial materials as done by industrial concerns. The materials studied evolve around the use of ores, wood, fuels, and agricultural products as they are transformed or processed by industry in the making of additional semi-finished raw materials such as plastics, leather, power, textiles, ceramics, steel, and metal products. The course material is developed through the use of (1) field trips to the industries, (2) films and visual aids concerning the transformation of the basic materials by industry, and (3) discussion periods with specialists of the industry government officials, and educators.

Credit: 2 semester-hour



North Campus View

DEPARTMENT OF MATHEMATICS

The graduate courses in mathematics are designed to meet the needs of teachers in service. There is opportunity for further study in pure mathematics, in the applications of mathematics to related fields, and for the study of current problems in the teaching and supervision of mathematics.

A candidate for the Master of Arts degree in mathematics should consult the Graduate Counselor of the Mathematics Department before matriculation, since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. Of the thirty-two graduate credits required for the degree, eighteen or more (the exact number depends upon the candidate's interest and previous preparation) must be taken in the Department of Mathematics. Most college graduates will be able to complete, if necessary, the prerequisite of thirty semester-hours of undergraduate mathematics in the Part-Time Division of the College.

REQUIREMENTS IN MATHEMATICS DEPARTMENT

- I. At least 18 semester-hours of graduate courses in mathematics are required. These courses must bear catalog numbers equal to or greater than 500, unless permission is granted the candidate by the Graduate Counselor of the Mathematics Department to take courses with numbers less than 500 for graduate credit.

The graduate courses in mathematics are grouped into the following three divisions:

A. Pure Mathematics

The basic subject-matter courses are MATHEMATICS 503, 504, 508, 517, 518, 519, 523, 524, 531, 532, 533.

B. Applied Mathematics

These courses emphasize the applications of mathematics to related fields of work. They give an extension and generalization of secondary-school mathematics together with certain phases of college mathematics which are employed in solving problems arising in the physical, biological, and social sciences. The principal aim is to supply background information that may be used to enrich the teaching of mathematics. These courses are: MATHEMATICS 512, 513, 522, 525, 535, 536, 551, 552, 553, 554, 602A, 602B, 602C.

C. Teaching and Supervision of Mathematics

The principal items considered are the current problems arising in the teaching and supervision of mathematics, the organization and construction of course syllabi, administrative problems, and the use of current mathematical literature. The chief purpose is to enable the teacher to select more suitable teaching material, to improve teaching techniques, and to use effectively various types of teaching aids. These courses are: MATHEMATICS 501, 506, 507, 528, 529, 530, 540, 601.

II. *Requirements in the Education Department*

A. EDUCATION 503, *Methods and Instruments of Research*, for two semester-hours, is required of all students.

B. In addition, four semester-hours must be selected from these courses: EDUCATION 408, 409, 500A, 500B, 500C, 504A, 505, 521A, 521B, 535, 536, 537, 538, 551, 553.

III. *Elective Courses*

The candidate may select, after consultation with the adviser, from six to eight credits of elective courses that will round out his total program of thirty-two semester-hours.

Thesis

In lieu of four of the required thirty-two credits, the candidate may write a thesis giving the results of some study in the field of mathematics or its teaching. This study must be made after consultation with the Graduate Counselor of the Mathematics Department and under the sponsorship of a member of the mathematics faculty. Plans should be made to have such a study in its final form and approved by the Mathematics Department by April 1st of the year in which the degree is anticipated. The preparation of such a dissertation does not relieve the candidate of any of the required credits in mathematics.

IV. *Final Examination*

A final examination in mathematics is given all candidates prior to the conferment of the degree. This examination is general in nature and is designed to test the candidate's maturity of thought in mathematics and in the teaching of mathematics.

GRADUATE COURSES

MATHEMATICS 501. *Administration and Supervision of Mathematics*

This course is concerned with the problems met in organizing and supervising the teaching of mathematics. The topics considered are the functions and qualifications of the supervisor of mathematics, in-service training of teachers, demonstration lessons, professional attitude and preparation of teachers, department meetings, selection of texts, current problems, research, and the basis for determining objectives. Some attention is paid to efficient methods of securing mastery of skills, the development of power in problem solving, and the organization of testing programs.

Credit: 2 semester-hours

MATHEMATICS 503. *Foundations of Algebra*

Careful consideration is given to the fundamental concepts and postulates which form the foundation of algebra. The modern algebraic theories of groups, rings, and number fields are introduced. The development of our number system, algebraic criteria for the possibility of geometric constructions, and the general theory and use of polynomial functions are considered.

Credit: 2 semester-hours

MATHEMATICS 504. *Modern Algebra*

Vectors and vector spaces are introduced as generalizations of numbers and number systems. Particular attention is also given to matrices, determinants, and linear dependence. Applications are considered.

Prerequisite: MATHEMATICS 503 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 506. *Principles of Teaching Secondary School Mathematics*

The primary purpose of this course is to relate recent psychological research into the learning process to the presentation of specific areas of secondary-school mathematics. Among the topics considered are: motivation, concept formation, drill, transfer of training, problem solving, and provisions for individual differences.

Credit: 2 semester-hours

MATHEMATICS 507. *The Teaching of General Mathematics*

This course is concerned with mathematics programs for the non-college-bound high-school student. Reports and recommendations from curriculum studies are examined. Among the topics considered are: characteristics of non-academic students, consumer mathematics, remedial arithmetic, preparation and use of resource materials, and classroom teaching techniques.

Credit: 2 semester-hours

MATHEMATICS 508. *Foundations of Geometry*

The elements of geometry include the logical foundations of geometry, finite projective geometries, construction of rational points on a line and on a plane, and topology. The emphasis is on the mathematical prerequisites for understanding contemporary proposals for secondary-school geometry.

Credit: 2 semester-hours

MATHEMATICS 512. *Numerical Analysis*

This course deals with the determination of functions from observed experimental data. Among the topics considered are: finite differences, symbolic operators, differencing, interpolation formulae, the Gamma function, and the Euler-MacLaurin formula. The course is designed to show the nature of mathematics as an applied science.

Credit: 2 semester-hours

MATHEMATICS 513. *Computer Programming*

This course is concerned with the elementary mathematics of computer programming. The use of machines by high-school students and the development of simple codes are considered.

Credit: 2 semester-hours

MATHEMATICS 517. *The Theory of Numbers*

This course offers a systematic treatment of certain fundamental properties of numbers along with a discussion of their historical background. It includes such topics as: properties of integers; Euclid's algorithm; prime numbers; factorization; perfect numbers; linear indeterminate and Diophantine problems; properties of congruences and their solutions; fundamental theorems of Euler, Fermat, Wilson, and others; and quadratic residues.

Credit: 2 semester-hours

MATHEMATICS 518. *The Theory of Functions of Real Variables*

The fundamental properties of real numbers and the elementary properties of functions of real variables are systematically developed. Among the topics considered are: continuity, differentiability, integrability, algebraic and transcendental functions, hyperbolic functions, and infinite series.

Prerequisite: MATHEMATICS 407 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 519. *The Theory of Functions of Complex Variables*

The fundamental properties of complex numbers and the elementary properties of functions of complex variables are developed. These include the properties of mappings, line integrals, Cauchy-Goursat Theorem, and conformal mapping. The practical applications of the theory are stressed by the use of illustrative examples.

Prerequisite: MATHEMATICS 407 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 522. *Introduction to Probability and Statistics*

The primary objective of the course is to give at least a minimum preparation in probability and statistics for the topics that are included in the newer high-school program. Topics include: the summarization of data, intuitive probability, axiomatic development of probability, the Binomial and Poisson distributions, the normal curve distribution, elements of sampling and elements of testing hypotheses. Both the experimental and the axiomatic approach to this material are studied. An examination of currently available material is included. This course is not open to students who have received credit for MATHEMATICS 408.

Credit: 2 semester-hours

MATHEMATICS 523. *The Theory of Probability*

This course develops the formal mathematical theory of probability and also describes the empirical background. In addition a variety of applications in both physical and social sciences are developed. Topics include: historical background; sample space; elements of combinatorial analysis; Binomial, Poisson, and Hypergeometric distributions; normal distribution; mathematical expectation; random walk; and ruin problems.

Credit: 2 semester-hours

MATHEMATICS 524. *Statistical Inference and Sampling Theory*

In this course the student considers the planning and execution of a statistical study. Among the topics considered are: problems in descriptive statistics, discrete and continuous distributions, elements of sampling theory, tests of hypotheses, power functions of statistical tests, analysis of variance and covariance, statistical control, statistical efficiency, and nonparametric statistics. Applications are given to industrial, scientific, and social problems.

Prerequisite: MATHEMATICS 408 or 522

Credit: 2 semester-hours

MATHEMATICS 525. *Curriculum and Teaching of Junior High School Mathematics*

This course is intended to give teachers a deeper insight into the mathematical subject matter and the methods of teaching in grades seven and eight. The structure of the curriculum is studied with an emphasis upon the usual subject matter with provisions for individual differences. Patterns in arithmetic are stressed as an introduction for algebra. Experimental approaches to the study of statistics and geometry are also included.

Credit: 2 semester-hours

MATHEMATICS 528. *Mathematics Materials for Student Activities*

Some of the large amount of material available for individual and club activities in mathematics is considered in this course. Mathematical recreations, plays, topics for essays or club programs, contemporary articles and popular books on mathematics are studied. The materials vary from elementary arithmetical recreations to topics involving advanced mathematical ideas. Topics considered include: recreations; arithmetical, geometrical, and logical problems in arrangement; polyhedrons and crystallography; classical problems of antiquity; cryptography; magic squares; topological and unicursal problems.

Credit: 2 semester-hours

MATHEMATICS 529. *Curriculum Construction in Mathematics*

This course is concerned with the implications and classroom implementation of contemporary recommendations for college preparatory curriculums in secondary-school mathematics.

Credit: 2 semester-hours

MATHEMATICS 530. *Mathematics Materials for the Teacher of Mathematics*

This course is concerned with the adaptation and use of multisensory materials to motivate and improve the teaching of high-school mathematics. Particular attention is given to the equipment needed for a modern mathematics laboratory; to the effective use of such equipment; to such visual aids as pictures, drawings, slides, motion pictures, and bulletin-board exhibits; and to books, periodicals, and pamphlets needed for the school and for the teacher's library.

Credit: 2 semester-hours

MATHEMATICS 531. *Survey of Higher Mathematics*

This course is intended for students who have already taken several graduate courses in mathematics. The principal aim of the course is to provide these students with additional insight into the nature and content of the various fields of mathematics.

Credit: 2 semester-hours

MATHEMATICS 532. *Projective Geometry*

The methods of synthetic and analytic projective geometry are compared and used to emphasize the fundamental concepts of Euclidean geometry. Emphasis is placed upon the dependence of many common properties and theorems of Euclidean geometry and upon the properties of lines, parallelism, perpendicularity, similarity of figures, and the definition of distance.

Prerequisite: MATHEMATICS 508 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 533. *Non-Euclidean Geometry*

The development of Hyperbolic-Non-Euclidean and of Elliptic-Non-Euclidean geometry is carefully traced. A brief survey of the historical development of each is given. This course is designed for teachers and students of mathematics who desire a better perspective of the field of geometry.

Credit: 2 semester-hours

MATHEMATICS 535. *Professionalized Subject Matter: Algebra*

This course is devoted to a critical examination of secondary-school mathematics with special emphasis upon algebra. Stress is placed upon the integration of traditional and modern approaches to these topics: logic and proof, the number system, fundamental laws of algebra, algebra of sets, variables and functions, algebraic functions.

Credit: 2 semester-hours

MATHEMATICS 536. *Professionalized Subject Matter: Analysis*

This course is devoted to a critical examination of secondary-school mathematics with special emphasis upon analysis. The emphasis is on content and organization rather than on methods. Topics include: trigonometric, logarithmic, and exponential functions; analytic geometry of two and three dimensions; the theory of limits; the fundamental theorems of calculus; and the Advanced Placement program in senior high school.

Credit: 2 semester-hours

MATHEMATICS 540. *Research Seminar in Mathematics*

This seminar is designed primarily for those students who select some problem of interest in either the subject matter or the teaching of mathematics for intensive study and research. A written report is required of each student.

The course is open to all students who have had at least eight semester-hours of graduate work in mathematics. It is required of all students who wish to write a master's dissertation in this field.

Credit: 2 semester-hours

MATHEMATICS 551. *Mathematics of Social Sciences*

This course surveys the mathematics of economics, business, sociology, and psychology. The discussion includes such topics as: theory of investments, distribution of wealth and income, use of charts and graphs, business trends, and measurement and presentation of data in social sciences.

Credit: 2 semester-hours

MATHEMATICS 552. *Mathematics of Physical Sciences*

This course includes topics from physics; chemistry; and civil, mechanical, and electrical engineering. The chief purpose is to supply the teacher with background material that may be used to enrich the teaching of secondary-school mathematics.

Credit: 2 semester-hours

MATHEMATICS 553. *Mathematics of Statics and Dynamics*

The fundamental basic principles of this course are Newton's laws of motion, whose applications and consequences are carefully considered in the study of such topics as: the composition and resolution of forces, the statics of a particle and of a rigid body, forces acting upon a body, friction, straight-line motion, curvilinear motion, work and energy, and moments of inertia.

Credit: 2 semester-hours

MATHEMATICS 554. *Mathematics of Cartography, Astronomy, and Navigation*

An opportunity is here offered for mathematics teachers to become acquainted with the mathematics of mapping, astronomy, and navigation closely related to the algebra, solid geometry, and trigonometry taught in high school. A study of spherical geometry and trigonometry leads to topics in mathematical astronomy and geography and to navigation. The discussion includes such topics as: map projections, orbits of planets and satellites, escape velocities, dead reckoning, and celestial navigation.

Credit: 2 semester-hours

MATHEMATICS 601. *Workshop: Current Problems in the Mathematics Field*

This course is conducted as a workshop for the solution of such actual problems in the teaching of mathematics as: courses in mathematics for the general and for the specializing student; integration of mathematics with other courses; revision of subject-matter in particular fields, such as in plane geometry; and research problems in specific units of work. The class meets for conferences, reports, and lectures. Individual conferences between the instructor or consultant and each individual member of the class are held by appointment.

Credit: 3 semester-hours

MATHEMATICS 602A, B, and C. *Workshop on Contemporary Mathematics*

These courses are conducted as workshops to provide teachers with increased insight into contemporary mathematics. The emphasis is upon mathematical principles and concepts. Topics are selected for their significance in revisions of secondary-school mathematics programs. The topics include: analysis of statements, sets, algebra of sets, foundations of algebra, probability, statistics, statistical inference, foundations of geometry, topology, and mathematics of the infinite.

Total Credit: 6 semester-hours

SENIOR-GRADUATE COURSES

MATHEMATICS 402. *Applications of Mathematics*

This course deals with the use of instruments in precision measurements to supply adequate information and teaching techniques for various phases of junior and senior high-school mathematics. It includes the use of the abacus, hypsometer, transit, sextant, planimeter, plane table and scale drawing, etc. The student is required to make some of the simpler instruments and demonstrate their use for classroom instruction.

Credit: 3 semester-hours

MATHEMATICS 404. *Readings and Lectures in Mathematics*

Lectures are given upon advanced topics in mathematics and on those phases of mathematics which are finding new applications, especially as they are related to the secondary field. Besides a mastery of this lecture material, the student is held responsible for a written report on an approved topic or on specific readings in recent mathematical literature.

Credit: 2 semester-hours

MATHEMATICS 405. *History of Mathematics*

As a study of elementary mathematics emphasis is placed on the historical growth of arithmetic, algebra, and geometry. The development of fundamental concepts and operations involving the use of symbols is studied with emphasis placed upon noteworthy contributions and the influence of leading mathematicians. A by-product is the motivating effect of historical information on the teaching and learning of mathematics.

Credit: 2 semester-hours

MATHEMATICS 406. *Solid Analytic Geometry*

A review and extension of the theory of determinants, a study of lines and planes in space, of space coordinates, transformation of coordinates, loci in space, the sphere, and of quadric surfaces are considered in this course. The study of the general quadric equation in three variables, invariance under motion, and the classification of numerical equations completes the course.

Credit: 2 semester-hours

MATHEMATICS 407. *Advanced Calculus*

After a brief review of the fundamental concepts of elementary calculus, more advanced topics are considered which include the theory of limits, continuity, the general theorem of mean value, infinite series, partial differentiation, and multiple integrals.

Credit: 2 semester-hours

MATHEMATICS 408. *An Introduction to Mathematical Statistics*

This first course covers the usual topics in statistics, using calculus as a major tool in the derivation of formulas. Topics included are: types of data and types of measurement; attributes and variables; graphical representation; measures of central tendency and dispersion; moments; binomial, Poisson, and normal distributions; linear regression and correlation; elements of sampling theory and statistical inference.

Credit: 3 semester-hours

MATHEMATICS 409. *Introduction to Contemporary Mathematics*

The aim of this course is to develop the point of view of contemporary mathematics and to consider its potential influence upon secondary school mathematics. Special consideration is given to topics in professional literature for possible inclusion in secondary school mathematics. Such topics include sets, Boolean algebra, a modern concept of variable and function, a detailed study of sentences and statements, the use of symbolism and patterns in mathematics, linear programming, and the application of new mathematical techniques in the social sciences.

Credit: 2 semester-hours

MATHEMATICS 410. *Mathematics of Finance*

This course introduces the student to the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It also discusses the mathematics of life insurance covering the following subjects: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course is designed to give a helpful background to the mathematics teacher as well as to be an aid to the student of economics and insurance.

Credit: 2 semester-hours

MATHEMATICS 412. *Modern Geometry*

This course presents a treatment of modern synthetic geometry on an advanced level. It is based on a fundamental framework of plane geometry and maturity of teaching in the field of mathematics. This course is not open for credit to students who have received credit for MATHEMATICS 301.

Credit: 4 semester-hours

MATHEMATICS 415. *Differential Equations*

Various applications of differential equations and their standard methods of solution are treated in this course. Among the topics included are: linear differential equations of the first degree and of the first and higher orders, linear equations of the n th order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximation, and series solutions.

Credit: 2 semester-hours

MATHEMATICS 453. *Differential Calculus*

The basic concepts of differential calculus are developed including: functional relationships, slope, limits, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical applications of derivatives, velocity, and acceleration in curvilinear motion. The applications are developed utilizing the scientific background of the students. Students who have taken MATHEMATICS 201 may not take this course for credit.

Prerequisites: At least one year each of college mathematics, college physics, and college chemistry, or permission of the instructor

Credit: 3 semester-hours

MATHEMATICS 454. *Integral Calculus*

The basic concepts of integral calculus are developed including: integration procedures, solid analytic geometry, geometrical and physical applications of the definite integral in two and three dimensional problems, infinite series, and Fourier series with applications. The applications are developed utilizing the scientific background of the students. Students who have taken MATHEMATICS 202 may not take this course for credit.

Prerequisite: MATHEMATICS 453 or permission of the instructor

Credit: 3 semester-hours

MATHEMATICS 480. *Elements of Logic*

This course is intended to help the students develop an understanding of the methods of reasoning used in the mathematical sciences. The point of view and elementary processes of symbolic logic are studied. Background materials are included for the teaching of logical concepts in secondary schools.

Credit: 2 semester-hours

DEPARTMENT OF SCIENCE

The teacher of secondary school science is faced constantly with the problem of maintaining his professional competence with respect to recent advances in the fields of science and science education.

The past two decades have brought forth an astonishing array of new discoveries in biology, chemistry, physics, and other branches of science. Entirely new scientific points of view have to be considered by a teacher who wishes to keep his classroom practices up to date with the most recent findings as reported in current newspapers, magazines, and books.

The unusual growth of enrollment in secondary schools has brought the science teacher numerous difficult problems of science education which require a more scholarly background than has been necessary in previous decades. It is clear that the demands to be made upon the science teacher in the near future will greatly exceed those of any previous decade. A thorough knowledge of science and secondary education is necessary to professional success and promotion.

Other factors operate to multiply the problems of high school science teachers. The rapid growth of work in science in elementary schools and the extraordinary growth of junior high school science preparation foreshadow a fundamental reorganization of the senior high school science program. This work is now well under way in many sections of the country. The courses offered here are designed to help the science teacher meet these changing needs.

Prior to matriculation in the Science Department for the Master of Arts degree the student should complete a subject matter background of thirty semester-hours of college science distributed in the areas of biology, chemistry, and physics. Deficiencies must be made up prior to the conferment of the A. M. degree. A minimum of eighteen semester-hours of graduate credit work in science is required. SCIENCE 401 will not be accepted toward meeting this eighteen semester-hour departmental requirement. The student's work program is prepared in cooperation with the science adviser. Any changes in the student's work program are made only with the written approval of the science adviser.

COURSE REQUIREMENTS FOR THE A. M. DEGREE IN SCIENCE

I. *Education Requirements*

Each student must take EDUCATION 503, *Methods and Instruments of Research*, and four additional semester-hours in Education courses.

II. *Science Requirements*

- A. The candidate must complete three or four semester-hour courses from among the following:

Biology 402, 407, 408, 409, 509
Chemistry 405, 406, 407, 408, 411, 412, 508, 509, 510
Physics 402, 405, 406, 407, 408, 409, 411, 510, 512
Science 405, 410, 421

12 semester-hours

- B. The candidate may elect two to three semester-hours from among the following:

Biology 501, Chemistry 501, Science 401D, Physics 501

- C. The candidate may elect up to six semester-hours from among the following:

Biology 412, 413, 414, 508
Chemistry 413
Physics 513
Science 411, 412, 413, 414, 415, 418

- D. The candidate must take SCIENCE 505, *Science Seminar for Junior and Senior High Schools*.

2 semester-hours

- E. With the consent of his adviser, the candidate may elect from among Science courses, Education courses, or other courses on the 400-500 level.

Maximum possible for E—6 semester-hours

BIOLOGY

GRADUATE COURSES

BIOLOGY 501. *The Teaching of Biology in Secondary Schools*

This is a seminar and research course designed to give opportunity for study of the best methods and practices being used in the teaching of secondary school biology. Major topics of discussion are: aims of secondary school biology, course content, functions of textbooks, testing, laboratory exercises and demonstrations, and the collection and use of suitable and available laboratory materials. A study is made of recent research studies in the field of biology teaching.

Prerequisite: 16 semester-hours of work in biology

Credit: 3 semester-hours

BIOLOGY 508. *Social Applications of Biology*

This field-study course offers to teachers of science an opportunity to gain first-hand knowledge of the uses made of biological principles in industry and in modern laboratories. Field trips are designed to cover such varied interests as public health and hospital routine laboratories, medical botanical research laboratories, and the inspection of model industries developing biological products.

Prerequisite: 12 semester-hours of work in biology

Credit: 4 semester-hours

BIOLOGY 509. *Field Studies of Flowering Plants*

The emphasis of this course is placed upon the methods of identification of higher plants and the ecological factors affecting the growth and development of these plants. Plants in their winter conditions are considered first. As the season progresses, the emphasis changes from the identification of woody to herbaceous forms. Plant communities of various types are observed, and the factors influencing their development are discussed. Field trips are taken to such typical habitats as the Pine Barrens, Troy Meadows, and others.

Prerequisite: General botany

Credit: 4 semester-hours

SENIOR-GRADUATE COURSES

BIOLOGY 402. *Mammalian Anatomy and Histology*

A study is made of the gross structure of a typical mammal and of the structural peculiarities of its various tissues. Both the anatomical studies and histological studies included in this course are pursued with functional significance strongly emphasized. This course prepares the student for the study of human physiology.

Prerequisite: 8 semester-hours of work in zoology

Credit: 4 semester-hours

BIOLOGY 407. *Comparative Embryology*

A study is made of the stages in development and factors influencing the development of different animal types, particularly the vertebrates. Students in this course follow carefully the development of the chick through the earlier stages. Serial sections of entire chick embryos in different stages of development are prepared by individual students and used as a basis for the study of the development of tissues and organs of the animal. Applications of these details of vertebrate development to the development of the mammal are based on observations made through the dissection of pig embryos.

Prerequisite: 8 semester-hours of work in zoology

Credit: 4 semester-hours

BIOLOGY 408. *Biological Technique*

This course is designed to furnish the prospective teacher of biology with the technical details necessary to enable him as a secondary school teacher to handle successfully biological materials and experiments and demonstrations in which these materials are employed. Students are trained in methods of collecting and preserving plants and animals for use in the laboratory and classroom. Study is made of the proper methods of preparing illustrative materials with special emphasis laid upon the purpose of these materials.

Prerequisites: 8 semester-hours of work in zoology and 4 semester-hours of work in botany

Credit: 4 semester-hours

BIOLOGY 409. *Human Physiology*

A study is made of normal and abnormal physiology based on previous study of mammalian anatomy and histology. In addition to an analysis of the part played by organs and tissues in carrying out the essential functions of the body, special attention is given to

problems of hygiene and sanitation. Applications of the above problems are made in reference to children of school age, and the physical condition of individual pupils is correlated with their behavior in the classroom.

Prerequisite: A course in vertebrate anatomy or BIOLOGY 402

Credit: 4 semester-hours

BIOLOGY 410. *Comparative Anatomy of the Vertebrata*

This course deals with representative members of the phylum chordata. The prochordata are considered briefly. Representative species of the cyclostomata, cartilaginous fish, bony fish, amphibia, reptiles, birds, and mammals are studied by means of dissections and demonstrations. Fundamental principles of the taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and should be of value for those interested in man and his place in the world.

Credit: 4 semester-hours

BIOLOGY 411. *Elementary Bacteriology*

This course covers the morphological and biochemical characteristics of bacteria, yeasts, fungi, and protozoa. The relationship of microorganisms to human welfare is stressed. Major topics include: history of microbiology, classification and naming, the physiology of microorganisms, microbiologic techniques and methods, useful activities of microorganisms, microbiology of sewage and water, microbiology of foods, infection and body defenses and infectious diseases. Laboratory sessions emphasize morphological characteristics and biochemical activities of microorganisms.

Prerequisites: BIOLOGY 101, 102, 201, and 202

Credit: 4 semester-hours

BIOLOGY 412. *Genetics*

This course considers the scientific basis of the gene concept and its support in experiments from Mendel's work to the present allegations of the Lysenko school. Documents of some of the milestones in the history of the science are studied, and the adherence to scientific method carefully noted. The wide uses of the science in plant and animal improvement and the discoveries related to man's heredity make an integral part of the study. The course helps the teacher of biology or social studies to discriminate between what is scientifically known and what is political philosophy in genetics. Laboratory exercises supplement lectures and discussion.

An elementary college course in biology is the only prerequisite, and this may be waived in approved cases.

Credit: 2 semester-hours

BIOLOGY 413. *Economic Botany*

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered as well as that of the seed plants.

Credit: 2 semester-hours

BIOLOGY 414. *Field Ornithology*

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats is visited so that one can become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and other problems are also considered.

Prerequisite: A year of biology or the equivalent

Credit: 2 semester-hours

BIOLOGY 415. *Entomology*

This course is designed to cover the fundamental aspects of entomology, organized so as to give students a general idea of the entire field. The major emphasis is on understanding basic principles which are of physiological and ecological significance. A survey is made of the common insect families together with experience in identifying major orders and families. Attention is given to insects as economic pests and as vectors of disease. Laboratory work includes a study of gross and microscopic morphology and identification of major group of insects by the manipulation of keys.

Prerequisites: BIOLOGY 201 and 202

Credit: 4 semester-hours

CHEMISTRY

GRADUATE COURSES

CHEMISTRY 501. *The Teaching of Chemistry in Secondary Schools*

This course satisfies the requirements in the teaching of chemistry for the limited secondary certificate. A study is made of the objectives, recent trends, methods of presentation, courses of study, lesson planning, instructional aids, and subject matter of high school chemistry.

Prerequisite: 16 semester-hours in chemistry

Credit: 3 semester-hours

CHEMISTRY 508. *Advanced Organic Chemistry—Biochemistry*

In this course a study is made of the composition of living organisms, their nutritional requirements, their mechanism for promoting and regulating chemical action, and their metabolism of foods. A laboratory study is made of the components of foods, enzyme action, isolation of proteins, etc., blood and urine analysis.

Prerequisites: CHEMISTRY 405 and 406, organic chemistry

Credit: 4 semester-hours

CHEMISTRY 509. *Advanced Inorganic Chemistry*

This course offers opportunity for intensive and systematic study of the elements in the light of the periodic classification. Selected theories and principles of inorganic chemistry and some of their applications are studied in detail. A study is made of types of compounds. Directed use of chemical literature is an important part of this course. Individual experimental work in the laboratory consists chiefly of preparation and purification of inorganic compounds and testing for impurities in the products.

Prerequisite: A course in quantitative analysis

Credit: 4 semester-hours

CHEMISTRY 510. *Food Inspection and Analysis*

A study is made of the composition of commercial food products, the laws governing purity and marketing of foods, methods of analysis of foods and cosmetics, and the judging of foods for quality. Trips are made to food laboratories and food processing plants. Laboratory work is an extension of chemical and microscopic analysis to provide application of various analytical methods. Methods of extraction; detection of adulterants, preservatives, coloring; estimation of carbohydrates, fats, proteins, minerals, and vitamins are included in the laboratory work of the course.

Prerequisites: Organic chemistry and quantitative analysis

Credit: 4 semester-hours

SENIOR-GRADUATE COURSES

CHEMISTRY 405. *Organic Chemistry*

The course covers the chemistry of carbon compounds and gives increased facility and experience in manipulating complicated chemical apparatus. It treats of the role of chemistry in life processes, including the synthesis and adaptation of carbon compounds in industry, in medicine, and in daily living. The first semester's work covers the chemistry of simple chain compounds and includes fats and carbohydrates.

Credit: 4 semester-hours

CHEMISTRY 406. *Organic Chemistry*

The work of this semester covers the chemistry of multiple functional chain compounds, the ring compounds, proteins, vitamins, hormones, and the application of these compounds in industry, in foods, and in medicine.

Credit: 4 semester-hours

CHEMISTRY 407. *Advanced Quantitative Analysis*

This course is adapted to the needs and preparation of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colorimetric methods; use of organic reagents in analyses; electrometric titrations; conductimetric titrations; spectrographic methods of analysis; electrodeposition of metals; and special methods of analysis.

Prerequisites: General college physics and one semester of quantitative analysis, or special permission of the instructor

Credit: 4 semester-hours

CHEMISTRY 408A. *Industrial Chemistry, Part I*

The purpose of this course is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries in the State. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 408B. *Industrial Chemistry, Part II*

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in CHEMISTRY 408A. Also, a study is made of the economics of chemical industry, chemistry and industry in general, and the effects of chemical discoveries upon living conditions.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 411. *Physical Chemistry, Part I*

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermochemistry, and homogeneous and heterogeneous equilibria.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 412. *Physical Chemistry, Part II*

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radio-activity.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 413. *Atomic Structure and Atomic Energy*

This is a lecture course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics studied include the following: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; chemical versus atomic explosions; the chain-reacting pile; production of plutonium; detection and measurement of nuclear radiation and incendiary effects of atomic explosions; atomic energy for peace-time uses; radioactive isotopes in agricultural, biological, and chemical research; and availability of materials for atomic energy.

Prerequisites: General college chemistry and general college physics, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 415 and 416. *Modern Chemistry*

This course offers a survey of the fundamental principles of chemistry and a study of recent developments. It emphasizes structures of chemical species, particularly the relationships of these structures to the chemical and physical properties of substances.

It is a two-semester course with one weekly class meeting lasting two hours. The course is held in conjunction with the Continental Classroom telecast of eighty lecture-demonstrations per semester. Class meetings involve discussion, lectures, demonstrations, evaluations, or experiments to supplement the television presentation.

Credit: 3 semester-hours

PHYSICS

GRADUATE COURSES

PHYSICS 501. *The Teaching of Physics in Secondary Schools*

This course satisfies the requirements in the teaching of physics for the limited secondary certificate. A study is made of the objectives, methods, and techniques of presentation, courses of study, lesson planning, instructional aids, and subject matter of high-school physics. Attention is given to the recent trends in developing apparatus and other equipment suitable for teaching the principles of physics. Assignments are made from recent literature on the outcomes of teaching of physics by television and by other visual aids.

Prerequisites: Sixteen semester-hours of work in physics

Credit: 3 semester-hours

PHYSICS 502. *Atomic and Nuclear Physics*

The course content is based upon the eighty telecasts of CONTINENTAL CLASSROOM (NBC-TV) and the text material, and is supplemented by guest lecturers on specific areas (e.g. radiation measurement, atomic piles, and nuclear accelerators), and laboratory experiences on the eight required meeting dates. The course content is about equally divided as to atomic physics and nuclear physics. Consideration is given to such subjects as: determination of particle mass and charge, isotopes, spectra, energy levels, electron optics, nuclear spin, the nature of radioactivity, scattering, detection, particle accelerators, mass spectroscopy, sub-atomic particles, nuclear piles, etc.

Prerequisites: General college physics or Physics 501

Credit: 4 semester-hours

PHYSICS 510. *Advanced Problems in Photography*

This course is intended to meet the needs of the camera club teacher and the hobbyist. The course includes negative and positive alterations, toning, printing processes, studio portraits, color photography, and photomicrography. The student is expected to submit prints of exhibition quality for public showing.

Prerequisites: General college physics, general college chemistry, and a first course in photography

Credit: 4 semester-hours

PHYSICS 512. *Modern Physics*

This course is a survey of recent experimental research in physics and of the newer theories concerning nuclear physics and electricity. Such topics as atomic spectra, radioactivity, artificial transmutation of the elements, and cosmic rays are discussed.

Prerequisites: General college physics, general college chemistry, and a course in electrical measurements

Credit: 4 semester-hours

PHYSICS 513. *Nuclear Radiation*

A study of the nature of radiations is made. Particular attention is given to radiation measurement technique. The course is concluded with a study of health physics as related to radiation dosages and their effects. Some attention is paid to disposal of radioactive wastes, radiation protection, and safety precautions.

Prerequisites: General college physics, general college chemistry, and a course in electrical measurements

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

PHYSICS 402. *Magnetism and Electricity*

The most important aims and purposes of the course are as follows: (1) to provide a substantial background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

This course consists of lectures, demonstrations, reference readings, written and oral reports, laboratory experiments with modern electrical instruments, and construction of simple electrical devices. Some of the topics studied are: modern concepts of the electronic structure of matter, electric forces, magnetic fields, potential, resistance, impedance, capacitance, and characteristics of thermionic vacuum tubes.

Prerequisites: PHYSICS 101 and 102

Credit: 4 semester-hours

PHYSICS 405. *Light and Optical Instruments*

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light.

Prerequisites: General college physics and a course in electrical measurements

Credit: 4 semester-hours

PHYSICS 406. *Astronomy*

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, the cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system.

This study is aided by the use of selected films and slides, actual sky study and field trips, the use of the sextant, octant, transit, spectroscope, sky maps, planetaria, and telescopic observations.

Prerequisites: General college physics and chemistry

Credit: 4 semester-hours

PHYSICS 407. *Aviation*

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, lift, drag, stability, motions of an airplane, piloting, motorless flight, aircraft engines, power performance, types of propellers, engine instruments, and flight instruments.

Field trips to airports and aviation industries are included. Flight experience is made available as a part of this course. Students who have taken PHYSICS 307 are not eligible to take this course.

Credit: 4 semester-hours

PHYSICS 408. *Advanced Aviation*

This course deals with the study of navigation; meteorology as applied to flight operations; radio communications; flight and navigational radio aids; instrument flight; air traffic control; jet, turbojet, and rocket flight; and recent advancements in aviation.

Prerequisite: PHYSICS 307 OR PHYSICS 407

Credit: 2 semester-hours

PHYSICS 409. *Basic Electronics*

This is an introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube characteristics, vacuum tubes as circuit elements, and gaseous discharge. The use of transistors is also considered. Applications of electronics to instrumentation, radio, and television are introduced.

Prerequisites: General College Physics and Magnetism and Electricity

Credit: 4 semester-hours

PHYSICS 410. *Meteorology*

This course is designed to develop a fuller appreciation of our atmosphere with emphasis on the meteorological applications of physical principles. Consideration is given to weather elements; the temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment.

Credit: 2 semester-hours

PHYSICS 411. *Photography*

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks, and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction.

Prerequisites: General physics and general chemistry or permission of the instructor

Credit: 4 semester-hours

PHYSICS 415. *Introduction to Modern Physics*

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radio-activity, cosmic rays, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required.

Prerequisites: General College Physics, General College Chemistry, and a course in electrical measurements

Credit: 4 semester-hours

PHYSICS 416. *Introduction to Analytic Mechanics*

This course is a background course for science teachers. It includes some detailed treatment of the physics of classical mechanics, of the kinematics and dynamics of particles, and the dynamics of rigid bodies. The necessary mathematical methods of handling the data and theory are introduced and developed along with the course material. The course consists of lectures, discussions, demonstrations of practical application, and problem solving. There are two hours of lecture-recitation and four hours of laboratory work per week.

Prerequisite: General College Physics

Credit: 4 semester-hours

SCIENCE

GRADUATE COURSES

SCIENCE 505. *Science Seminar for Junior and Senior High Schools*

This course is designed to afford opportunity for graduate students in science, supervisors, and science teachers: (1) to investigate research in science education; (2) to organize science experiences and science information with teaching materials for the public schools. Each member of the group selects a project. This project must be presented to the science faculty and graduate students for evaluation.

Prerequisite: Certification to teach science or matriculation for the A. M. degree in science

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

SCIENCE 401D. *The Teaching of Aviation in Secondary Schools*

This course covers the study of State aviation programs, texts, bulletins, free material for school use, demonstration equipment, tests, working models, visual aids, and references needed to teach aerodynamics, aircraft engines, meteorology, navigation, and aircraft communication in high schools. Field trips to airports and aviation industries are included.

Credit: 2 semester-hours

SCIENCE 404. *Problems in the Teaching of Science*

When a student has completed the assignment in student-teaching in a public high school in the State of New Jersey and has accumulated some experience with the problems of high-school science instruction, he returns to the college campus for an intensive study of a limited number of problems in a single field of science. The student concentrates his attention on general science, biology, chemistry, or physics for this period. This course is mainly a study of the published investigations dealing with curriculum construction, evaluation of current practices in junior and senior high-school courses, and the psychology of learning in science.

Credit: 2 semester-hours

SCIENCE 405. *Field and Laboratory Studies in Science*

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the pur-

pose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e. g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and illustrating them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course.

Prerequisite: Proficiency in biology and chemistry

Credit: 4 semester-hours

SCIENCE 409. *Senior High School Physical Science Demonstrations*

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations for the teacher.

Credit: 2 semester-hours

SCIENCE 410. *Junior High School Science Demonstrations*

This course covers the methods of experimental instruction in grades seven, eight, and nine. A detailed study is made of about three hundred demonstrations.

Credit: 4 semester-hours

SCIENCE 411. *Problems in Field Studies in Science*

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose.

Prerequisites: Field Studies in Science or its equivalent plus at least 12 points of biology

Credit: 2 semester-hours

SCIENCE 412. *Field Studies in Science: Biological*

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

Credit: 2 semester-hours

SCIENCE 413. *Field Studies in Science: Physical*

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

Credit: 2 semester-hours

SCIENCE 414. *Conservation of Plants and Animals*

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Co-operating experts from State and Federal agencies bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 415. *Conservation of Soil and Water*

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 418. *Three Centuries of Science Progress*

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries. Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role which the man

of science occupies in the world today is contrasted with his counterpart in earlier centuries. Class demonstrations of historical experiments, readings in the original literature, and lectures and discussions are employed by the three or more science teachers of the course.

Credit: 2 semester-hours

SCIENCE 419. *Field Science and Conservation*

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

Credit: 2 semester-hours

SCIENCE 420. *Water Supply and Conservation Problems*

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, water shed management, stream pollution, and soil erosion, gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stoney Brook Watershed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

Credit: 3 semester-hours

SCIENCE 421. *Water Analysis and Purification*

This course covers the phases of water inspection, analysis, and purification of value in safeguarding public and private water supplies, and in securing potable water from questionable sources. The work consists of class discussions, field trips, and laboratory experiences. Field trips are to water purification plants, sewage disposal plants, and board-of-health laboratories. The laboratory work is divided between the fields of chemical and bacteriological analysis of water. The necessary bacteriological background is developed in the course. Chemical analysis includes tests for harmful impurities and hardness.

Prerequisites: CHEMISTRY 101 and 102

Credit: 4 semester-hours

DEPARTMENT OF SOCIAL STUDIES

The teacher of social studies works in a field the boundaries of which are constantly changing and expanding. The necessity for constant study, especially with regard to the contemporary social situation and its problems, presses upon every secondary school teacher of the social studies. The Social Studies Department at Montclair intends to provide for such teachers courses of an advanced character which will help to keep them abreast of the changes in a changing world. It also will provide advanced courses for those teachers who wish to increase their preparedness in specialized secondary school subjects. Finally, it aims to provide for the teacher-in-service an opportunity for keeping informed concerning the changing techniques and problems of teaching the social studies. Selections from advanced courses of the sort just described lead to the Master's degree in the social studies.

In order to qualify for the Master's degree in social studies, candidates will either prepare a thesis or pass an oral examination based upon a selected field of research.

REQUIREMENTS IN THE SOCIAL STUDIES DEPARTMENT

In general, a candidate must offer thirty-two hours of graduate credit, at least eighteen of which must be in the field of Social Studies, six in the field of Education, and six or eight (depending upon the number of social studies credits required) elective credits in fields closely related to the social studies. The following are the more specific requirements:

- I. All candidates must take a seminar course, either SOCIAL STUDIES 502 or SOCIAL STUDIES 518. A candidate *may* offer both these seminars since the subject-matter content, aside from the instructions in research, is different in both courses.
- II. The remaining social studies courses should represent a diversified choice from among the following fields:

Ancient and Medieval History

Social Studies 422, 423, 425, 426, 427, 473

Modern European History

Social Studies 414, 441, 448, 457, 458, 493, 506

United States History

Social Studies 408, 413, 419, 438, 447, 471, 474, 475, 480

The Americas

Social Studies 415, 435A, 435B, 440A, 440B, 453B

International Affairs

Social Studies 412, 434, 442, 451

Economics

Social Studies 446, 450A, 450B, 456, 517, 522, 523, 524

Sociology

Social Studies 429, 439, 443, 444, 476, 477, 494, 512, 513

Political Science

Social Studies 430, 433, 437, 515

Philosophy

Social Studies 403, 404

Educational Techniques

Social Studies 503

Credits may also be chosen to the amount of six from the offerings in Field Studies, China Institute, Workshop in Citizenship Education, and United Nations Institute.

- III. All candidates must take the course, EDUCATION 503—*Methods and Instruments of Research*, and four elective credits chosen preferably from the following:

Education 500B, 504A, 505, 550, 440

- IV. Elective credits in fields other than the social studies should be chosen from among the following:

Education 408, 410

English 402, 404, 432, 533, 536, 537, 545A, 545B

Business Education 409, 412

Geography 406, 408A, 408B, 409, 410, 411, 412, 413, 414A, 414B, 416, 418, 419, 420, 503, 504, 509

V. *Master's Thesis or Research Paper*

All candidates are required to complete either a Master's thesis or a Master's essay on a question or problem which has been chosen by the candidate for his specialization. The candidate is given an oral examination on the paper before a seminar of members of the Social Studies Department. Complete directions for this requirement may be obtained from the chairman of the department.

In the case of candidates offering undergraduate majors from institutions other than Montclair, it may be necessary to make more specific requirements with respect to choices among social studies and elective credits than is indicated above in order to fill gaps which may exist in the undergraduate major.

GRADUATE COURSES

SOCIAL STUDIES 502. *The Origin and Development of the American Constitution*

This course is an intensive study of the origin and framing of the Constitution of the United States. It aims to search out the roots and influences that determined our basic political institutions. The seminar method is employed and attention is given to the techniques of historical research and historical writing.

Credit: 2 semester-hours

SOCIAL STUDIES 503. *Modern Social Studies Instruction and Supervision*

This course is designed primarily to assist teachers and supervisors to obtain a comprehensive view of recent curriculum trends, current subject-matter tendencies, and newer practices in secondary school social studies. Topics discussed include: materials, methods, and techniques; use of audio-visual aids; courses of study and experimental problems; professional literature; and problems of the critic teacher and the supervisor.

Credit: 2 semester-hours

SOCIAL STUDIES 506. *The British Empire from 1783*

This course deals with the evolution of the British Empire from the period of the old Colonial system to the present British Commonwealth of Nations. The rise of dominion government, the forces of anti-imperialism, and the various solutions suggested from the improvement of imperial relations are stressed.

Credit: 2 semester-hours

SOCIAL STUDIES 512. *Social Legislation*

This course analyzes the social, economic, and political adjustments which have come about in our society due to technological progress.

Credit: 2 semester-hours

SOCIAL STUDIES 513. *Education and Intercultural Relationships*

Within our nation as within the world, along with common needs and interests, there exist differences between groups and individuals which act as barriers to satisfying human relationships. This course is devoted to a consideration of these barriers and of common interests and needs which exist in spite of such barriers. We study not only the existence of such conditions but also the attitudes, principles, and techniques which may make for better human relationships.

Credit: 2 semester-hours

SOCIAL STUDIES 515. *History of Political Thought*

The major theories of representative political philosophers concerning the nature, functions, organization and sovereignty of the state are studied in this course. Among those discussed are: Plato, Aristotle, Cicero, Thomas Aquinas, Machiavelli, Luther, Calvin, Bodin, Hobbes, Locke, Spinoza, Montesquieu, Rousseau, Hume, Bentham, J. S. Mill, Burke, Hegel, Marx.

Credit: 2 semester-hours

SOCIAL STUDIES 517. *Money and Banking*

An opportunity is provided for an analysis of the monetary and banking principles and practices basic to modern economic organization. Consideration is given to the various theories of money, the relation of money to prices, banking systems and their operation, and the nature and significance of credit. Special attention is directed to an examination of the functioning of the Federal Reserve System in relation to the gold standard, a managed currency, stability, inflation and deflation.

Credit: 2 semester-hours

SOCIAL STUDIES 518. *Recent Trends in American History (1918 to the Present)*

Without attempting to reach final conclusions, this course analyzes the major problems which have influenced American life since the First World War. The new position of the nation in world affairs, the modifications of the old economic order, the progress of social and political change are all surveyed. This course, like SOCIAL STUDIES 502, is conducted by the seminar method and may be taken instead of that course. As the subject matter is different, except for the instruction in methods of research, both courses may be taken.

Credit: 2 semester-hours

SOCIAL STUDIES 522. *The Development of Economic Institutions and Ideas*

This course deals with the changing principles, institutions and ideas which determine the character of economic society. The doctrines of the more important schools of economic thought such as the Classical, Historical, and Institutional groups are emphasized, and the teachings of the Mercantilists, Physiocrats, Adam Smith, Malthus, Ricardo, Marx, Henry George, Veblen, Hobson, Commons, Keynes, and others are examined in relation to the important problems of money, credit, prices, business cycles, foreign and domestic commerce, property, wages, the nature of wealth and value, and economic planning.

Credit: 2 semester-hours

SOCIAL STUDIES 523. *The Economics of the Business Cycle*

The purpose of this course is to consider the nature of business cycles and their impact on the national economy, to survey business cycle theories, and to analyze the significant proposed methods of control for the purpose of developing a desirable public program conducive to economic stability.

Credit: 2 semester-hours

SOCIAL STUDIES 524. *The Economics of Public Fiscal Policy*

This is a course for the mature student interested in the effect of government tax policies on the national economy. Consideration is given to the various theories of justice in taxation: the incidence and shifting of the tax burden; the constitutional aspects of government finance; fiscal policy and full employment; taxation and economic inequality; the economics of public borrowing; and management of the national debt. Particular emphasis is placed on the conflicting issues which have arisen from the increasing encroachment of public finance on both business and the consumer due to war and recurrent depressions. Attention is also given to such special programs as the Marshall Plan and aid to underdeveloped economic areas.

Credit: 2 semester-hours

SOCIAL STUDIES 525. *Workshop on Economic Education*

This workshop is designed to provide teachers, supervisors, and administrators with a better understanding of the American economy and its operation. Instruction is given by a staff of economists and curriculum specialists, supplemented by businessmen, labor leaders, and representatives of agricultural groups. Workshop committees with the help of specialists prepare syllabi and teaching materials. Special library facilities are provided as well as selected teaching aids and field trips.

Credit: 3 semester-hours

SENIOR-GRADUATE COURSES

For more complete descriptions see the undergraduate catalog.

ANCIENT AND MEDIEVAL HISTORY

SOCIAL STUDIES 422. *Greek Civilization*

The aim of this course is to present the development of Greek civilization from the earliest period to the beginning of the Christian era.

Credit: 2 semester-hours

SOCIAL STUDIES 423. *Roman Civilization*

This course traces the social changes in Rome from the earliest times to the end of the Western Roman Empire. The rise and fall of the empire are discussed with relation to their importance in medieval civilization.

Credit: 2 semester-hours

SOCIAL STUDIES 425. *Medieval Civilization*

This course covers the period from the decline of Rome to about 500. It first emphasizes the blending of barbarian cultures with that of the Roman resulting in feudalism as a way of life. After that study is made of the gradual evolution of towns, a trade and industrial economy on a broadening scale, the emergence of monarchical states, an intellectual awakening with the founding of universities, all of which leads finally to our modern system of national states.

Credit: 3 semester-hours

SOCIAL STUDIES 426. *Medieval History to 1498*

In the first part a study is made of the factors contributing to the political breakdown of the imperial principle, such as the growth of Christianity, barbarization of the West, and the expansion of Islam. The second part is devoted to the developments in Western Europe after 1200, stressing political movements, medieval commerce, guilds, growth of towns, and cultural changes.

Credit: 4 semester-hours

SOCIAL STUDIES 427. *Ancient History to 378 A. D.*

The first part of this course covers the Oriental period and the Greek through the Periclean Age. The second part covers the Hellenistic period from the rise of Philip of Macedon, stressing attempts at federalism.

Credit: 4 semester-hours

SOCIAL STUDIES 473. *The Arts in Western Civilization*

This course is designed to show how the social, economic, political, and religious movements in Western Civilization influenced the aesthetic expression of Europe from the Golden Age of Greece to the Rise of the Industrial Revolution. Greek, Roman, Byzantine, Gothic, Baroque, and Rococo art, architecture, and music are discussed and illustrated.

Credit: 2 semester-hours

MODERN EUROPEAN HISTORY

SOCIAL STUDIES 414. *Modern England*

This course deals both with the historical periods as such and with the influences of the political, economic, and social forces in the English literature of the century. The Napoleonic era, political reform, factory reform, the humanitarian movement, the Irish question, the ministries of Gladstone and Disraeli, and the interpretation of politics and literature are considered.

Credit: 2 semester-hours

SOCIAL STUDIES 441. *Economic History of Europe*

The study of Europe from an economic point of view is particularly important in the light of present European problems and their relation to world-wide conditions. This course is a survey of the economic life and development of Europe from the emergence of the ancient civilizations to the beginning of the modern economic world.

Credit: 2 semester-hours

SOCIAL STUDIES 448. *The British Dominions*

This course deals with the role Canada, Australia, New Zealand, and South Africa are playing in present world affairs. Special emphasis is given to Canada and its dual position as an American state and a part of the British Empire.

Credit: 2 semester-hours

SOCIAL STUDIES 457. *Development of Russia*

Factors which have shaped the evolution of the Russian people, such as Byzantinism and the Greek Orthodox faith, the Synod, Tartar state organization, the Mir, Westernization from Peter to Lenin, Slavophilism, and dialectic materialism, are emphasized.

Credit: 2 semester-hours

SOCIAL STUDIES 458. *Russia as a World Power*

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, and Stalin, is described.

Credit: 2 semester-hours

SOCIAL STUDIES 493. *Western Europe Since World War I*

This course presents an outline of the rise of communism and fascism and the reaction of the western democracies to these movements. The Civil War in Spain, the Munich Pact, the failure of the League of Nations, diplomatic events of the World War II era, United Nations problems, the North Atlantic Pact, and special problems of western defense are emphasized. An evaluation of western Europe's significance for the United States is attempted.

Credit: 4 semester-hours

UNITED STATES HISTORY

SOCIAL STUDIES 408. *A History of New Jersey*

This course is designed to assist teachers in acquiring a better knowledge of their state. A study is made of the history of New Jersey from the point of view of the social, political, economic, and cultural development of the people from the beginning of settlement to the present. Special attention is given to the geographical and industrial aspects of the state, and the place of New Jersey in the national setting.

Credit: 2 semester-hours

SOCIAL STUDIES 413. *Economic History of the United States*

The great trends and movements in agriculture, finance, commerce, manufacturing, transportation, and industrial relations are traced from their beginnings in the colonial period to their contemporary expressions in the present crisis.

Credit: 2 semester-hours

SOCIAL STUDIES 419. *American Political Biography*

This is the study of the life and influence of the leading figures in American political and social history. It is the aim here to show the relation of each of these characters to the times in which he lived and to point out how he influenced the trend of American life. The study includes such leaders as Washington, Jefferson, Hamilton, Webster, Lincoln, Cleveland, T. Roosevelt, and Wilson.

Credit: 2 semester-hours

SOCIAL STUDIES 438. *The Literature of American History*

A brief description of the material available for the study of American history is followed by class practice in finding and using the primary sources of some of the facts commonly taught in schools.

Credit: 2 semester-hours

SOCIAL STUDIES 447. *Diplomatic History of the United States*

The purpose of this course is to show how we have become gradually conscious of our world interests and responsibilities, and the important role we have come to play in international politics.

Credit: 2 semester-hours

SOCIAL STUDIES 471. *The United States Since World War I*

This course surveys the major problems, economic, social, political, and international, which have marked our national development since the end of the first World War. It is intended especially for social studies seniors as a preparation for the second year of secondary school American history as provided for in the recently adopted state requirements.

Credit: 2 semester-hours

SOCIAL STUDIES 474. *America in Transition*

This course surveys rapidly the results of the Civil War and then emphasizes the major trends, economic and social, which have made modern America. It is intended as a more advanced study than that which is made in the undergraduate course. The period covered is from 1867 to around 1914.

Credit: 2 semester-hours

SOCIAL STUDIES 475. *The History of American Thought*

This course considers the influential thinking in America from the Mayflower Compact to the Marshall Plan to see how certain ideas or trends of thought have grown out of situations and have in turn helped to mould the course of our history. The student should gain an appreciation for the American contribution to world culture, and an examination is made of outworn stereotypes which exist today. The writings and discourses of important American thinkers are considered including Mather, Paine, Jefferson, Emerson, Thoreau, and Veblen.

Credit: 2 semester-hours

SOCIAL STUDIES 480. *Social History of the United States*

This course presents a study of the social and cultural aspects of American history. As such, it supplements but does not take the place of economic and political history. The course considers population movements and growth, rural and urban social problems, status of women, family life, utopian ventures, mass media of communication, amusements and recreation, and human rights.

Credit: 2 semester-hours

THE AMERICAS**SOCIAL STUDIES 415. *Latin-American Relations of the United States***

This course aims to provide the information necessary to a clear understanding and accurate appreciation of the political, economic, and social relations that have developed between us and our Latin-American neighbors.

Credit: 2 semester-hours

SOCIAL STUDIES 435A. *The Americas: A Contemporary Political, Economic, and Cultural Survey, Part I*

This course deals specifically with the relations of the United States and the Caribbean countries. Attention is given to the dependencies of the United States in this region as well as to the independent republics. Twentieth Century political, economic, and cultural developments of this region are stressed in light of the inter-American system.

Credit: 2 semester-hours

SOCIAL STUDIES 435B. *The Americas: A Contemporary Political, Economic, and Cultural Survey, Part II*

This course deals specifically with the Twentieth Century political, economic, and cultural life of the South American nations. The role which the South American states play in world affairs is stressed. Attention is given to post-World War II developments and adjustments in South America.

Credit: 2 semester-hours

*SOCIAL STUDIES 440A and 440B. *The Development of Central and South America as Colonies and Nations*

The first part of this course surveys the period of exploration and settlement in the colonies of South and Central America. The second part studies the experiences of the various Latin-American nations under different forms of government.

Credit: 2 semester-hours each

SOCIAL STUDIES 453B. *The Development of Canada*

This course is devoted to the study of the historical background, geographical environment, governmental organization, economic behavior, and social conditions of the northern neighbor of the United States. Its professional objective is to provide the understanding and appreciation necessary to the student and teacher who may follow and interpret the growth, internal and external, of the Dominion of Canada and of its relation to the United States as well as to the British Commonwealth of Nations.

Credit: 2 semester-hours

INTERNATIONAL AFFAIRS

SOCIAL STUDIES 412. *International Government*

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international legislative, executive, administrative, and judicial problems are studied.

Credit: 3 semester-hours

SOCIAL STUDIES 434. *Contemporary World Affairs*

This course is devoted to a survey of the leading diplomatic, economic, political, and military issues before the world today. The backgrounds from which these international affairs have evolved are reviewed.

Credit: 2 semester-hour

SOCIAL STUDIES 442. *The Far East*

A study is made of the economic, social and cultural situation of the Far East, with particular emphasis on the historical background of China and Japan, and on our relations with the Philippines.

Credit: 2 semester-hour

* Note: Courses 435A, 435B, 440A, and 440B are independent courses; none is prerequisite for another.

SOCIAL STUDIES 451. *The Middle East*

This course is a survey of Indian and Moslem civilizations. Post-war planning for the region from the Near East through Persia, India, Burma, Thailand, and Malaya to the Netherland East Indies is discussed.

Credit: 2 semester-hours

ECONOMICS

SOCIAL STUDIES 446. *Current Problems in Economics and Government*

This course is designed to analyze the relationship of economics to government. The causes and results of governmental activities are discussed in the light of their economic significance and their bearing on public welfare.

Credit: 2 semester-hours

SOCIAL STUDIES 450A and 450B. *Modern Economic Problems and Policies*

The purpose of this course is to contribute to the general need for increased knowledge in the area of economic relationship, using the problem approach method of analysis. 450A begins with a brief recapitulation of the overall functioning of the economic system, after which the class proceeds to a detailed study of our broader economic problems and the public policies relating to them. Specifically, the problems are those relating to population and natural resources, the economic functions of government, the measurement of economic activity, monetary stability, basic banking problems, business cycles, marketing trends, economic inequality, and social security. 450B considers those problems associated with the world economy, international trade and exchange, monopoly and its regulations, the problems concerned with the control of public utilities, emergency price regulation and economic stabilization, labor problems, the problems of public finance, the public debt and fiscal policy, and, finally, the nature of comparative economic systems and their relations with each other.

Credit: 4 semester-hours

SOCIAL STUDIES 456. *International Economic Relations*

The purpose of this course is to study the significance of international trade and exchange to the economic life of our nation and to the world economy.

Credit: 2 semester-hours

SOCIAL STUDIES 482. *Conservation and Rural Economic Life*

This course provides for a study of one of the basic economic problems in America today. Land use, farm loans, price support of farm products, increased acreage production, conservation practices, are among the topics studied to give the student a better understanding of the relationship between rural and urban living. Trips are arranged to nearby farms, dairy cooperatives, farm bureaus, banks, and town meetings.

Credit: 2 semester-hours

SOCIOLOGY**SOCIAL STUDIES 429. *Present-Day Social Problems***

Beginning with a survey of levels of living in the United States and their relation to the distribution of wealth and income, this course proceeds with a study of poverty and crime, their sources, treatment, and prevention.

Credit: 2 semester-hours

SOCIAL STUDIES 439. *The Family and Its Problems*

This course gives a history of the family, our American family patterns, the effects of social change, marital patterns of interaction, social roles, sources of conflicts and frustration, divorce and desertion, special problems in family life, economics of children and the home, social legislation pertaining to family problems, marital adjustments, personality change after marriage, parent-child relationships, and personality reorientation.

Credit: 2 semester-hours

SOCIAL STUDIES 443. *Youth and the Community*

This course is a sociological study of youth in its many relations to the community. Special attention is given to problems which arise in the relationship of youth and the community; e. g., juvenile delinquency, conditions contributing to maladjustment, poorly adjusted children, and educational and social agencies active in solving youth behavior.

Credit: 2 semester-hours

SOCIAL STUDIES 444. *The Social Bases of Human Relations*

This course emphasizes the social bases of human nature and personality. Primary and secondary groups, folkways, mores, and institutions are considered.

Credit: 2 semester-hour

SOCIAL STUDIES 476. *Personality Development and Group Relations*

A study is made of personality growth through social contacts, the environmental factors found in the home and family, neighborhood, play, and school groups. Methods of measuring the place of the individual in the group, analysis of the group process, ways of bringing about better life adjustment, and integrating experiences are the subject matter of the course. Concrete cases of maladjustment to society and disintegrated personality are studied. Agencies in the community which serve youth are visited, and leadership in community group activities is recognized as part of the course requirements.

Credit: 2 semester-hours

SOCIAL STUDIES 477. *Rural Sociology*

During this course the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

Credit: 2 semester-hours

SOCIAL STUDIES 483. *Modern Approaches to Social Problems*

This course is designed to acquaint students with techniques and practices developed in recent years for a scientific approach to problems of human relationship. Techniques to be studied include: sampling techniques for testing large groups, questionnaires, interviewing techniques, objective observation of culture patterns, objective observation in controlled laboratory situations, sociometrics, role-playing techniques, attitude testing, and use of semantic analysis in test construction. Students become acquainted with these techniques through the study of a variety of recent reports. The selection of themes to be studied depends on the needs and interests of class members. This course is designed to aid in the development of attitudes and practices which make possible the use of a modern, scientific approach to social problems.

Prerequisite: An introductory course in sociology or special permission of the instructor

Credit: 2 semester-hours

SOCIAL STUDIES 494. *Social Studies and Conservation*

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the non-renewable resources, minerals, oil.

and coal. Economic, social, community, national, and individual problems are approached by giving the student first-hand experiences gained through extensive field trips in northern New Jersey. This course is of particular interest to social studies and elementary school teachers but also forms an excellent experience background for all educational fields. Methods of teaching, courses of study, and teaching units are developed.

Credit: 2 semester-hours

POLITICAL SCIENCE

SOCIAL STUDIES 430. *The Citizen and the State*

This course is designed to help any citizen become better acquainted with the many organizations by and through which our complex society manages itself. The emphasis is placed on government and political organizations, but the course also includes a study of the many other organizations of the community, the county, and the state that have to do with directing policy and maintaining controls. The aim of the course is to encourage intelligent appreciation and participation rather than simply to accumulate academic information. Consideration is also given to the ways in which such working knowledge can become a part of the experience of the pupils in our schools.

Credit: 2 semester-hours

SOCIAL STUDIES 433. *American Political Thought*

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by such men as Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

Credit: 2 semester-hours

SOCIAL STUDIES 437. *The Political Party System in the United States*

Among the topics discussed are: party organizations, the political boss, the political machine, party finances, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the development of the party system, sectional politics, the farm vote, the labor vote, and the future of party government in the United States.

Credit: 2 semester-hours

PHILOSOPHY

SOCIAL STUDIES 403. *Seminar in Social Studies—Basic Issues in the Social Studies*

This offering is designed for social studies majors when they return from student teaching. As its title suggests, the course is built around issues which have long been considered fundamental to an understanding of American democracy.

Credit: 2 semester-hours

SOCIAL STUDIES 404. *The Philosophy of History*

It is the purpose of this course to investigate the relation of history to the other social studies and also the major attempts to find the meaning of history. A brief survey is made of the leading philosophies of history.

Credit: 2 semester-hours

FIELD STUDIES IN AMERICAN LIFE

SOCIAL STUDIES 460. *Central Eastern Region*

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states. Travel is by modern chartered motor coach, and overnight stops are made at first-class hotels. Among the places visited are: Valley Forge, Philadelphia, Baltimore, Annapolis, Washington, Arlington, Alexandria, Mt. Vernon, Fredericksburg, Richmond, Washington's birthplace at Wakefield, Lee's plantation at Stratford, Yorktown, Williamsburg, Jamestown, Raleigh, Chattanooga, Asheville, Great Smoky Mountains, Norris Dam, Jefferson's Monticello at Charlottesville, Natural Bridge, Skyline Drive in the Shenandoah National Park, Luray Caverns, Winchester, Harper's Ferry, Frederick, Gettysburg, and the Pennsylvania Dutch area around Lancaster and Ephrata.

Credit: 3 semester-hours

SOCIAL STUDIES 461. *New England and French Canada*

This field study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. The trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels. The route covers the lower Connecticut Valley, including Hartford, Springfield, Northampton, and Deerfield; the Rhode Island cities of Providence and Newport; historic Massachusetts towns such as Plymouth, Boston, Lexington, Concord, Salem, and Marblehead; the coast of New Hampshire and southern Maine; the White Mountains in the Mt. Washington and Franconia Notch area; the Canadian Province of Quebec, including the ancient French city of Quebec, Montmorency Falls, St. Anne de Beaupré, Montreal; the western shores of Lake Champlain, Lake George, and the Hudson River. It is an indispensable background for an understanding of Colonial and Revolutionary life and history in this region.

Credit: 3 semester-hours

SOCIAL STUDIES 462. *Continental United States*

This field study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. The trip is made in a modern chartered motor coach with overnight stops at first-class hotels. The route covers about 12,500 miles and visits 26 states and 6 National Parks. Among the major points of interest are Gettysburg, Natural Bridge, Blue Ridge and blue grass region, Mammoth Cave, Lincoln shrines in Kentucky and Illinois, Dodge City, Royal Gorge, Pikes Peak, Denver, Rocky Mountain National Park, Taos and other Indian Reservations, Santa Fe, Petrified Forest, Painted Desert, Grand Canyon, Bryce and Zion National Parks, Hoover Dam, Los Angeles, Hollywood, San Diego, San Juan Capistrano and other Missions, Tia Juana, Santa Barbara, Sequoia and Yosemite National Parks, Monterey, San Francisco, Sacramento, Lake Tahoe, Reno, Donner Pass, mammoth redwood groves, Crater Lake, Columbia River Valley, Portland, Seattle, Mt. Rainier, Grand Coulee Dam, Spokane, Butte, Yellowstone National Park, Salt Lake City, pioneer trails of Wyoming, Black Hills, Chicago, Detroit, Toronto and Niagara Falls. All important geographic and historical features are studied under the instruction of members of the college faculty and local specialists. Write for detailed descriptive folder.

Credit: 10 semester-hour

SOCIAL STUDIES 466. *Puerto Rico and the Virgin Islands*

This is a nine-day field study course devoted to a survey of our nearest island possessions. It includes a rather thorough exploration of San Juan and its vicinity, including the University, the rain forest and the submarine gardens, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rum producing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air. It is usually offered during the Christmas holidays.

Credit: 2 semester-hours

SOCIAL STUDIES 467. *Florida*

This is a field-study course covering the Florida peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa; and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies. It is usually given during the Easter vacation.

Credit can be given for only one of the following courses: SOCIAL STUDIES 467 and 484.

Credit: 2 semester-hours

SOCIAL STUDIES 469. *Mexico*

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Overnight stops and meals are at the best hotels. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Puebla, Oaxaca, Guadalajara, Queretero, Guanajuato, Patzcuavo, San Miguel de Allende, San Jose Purua, Morelia, Toluca, Taxco, and Cuernavaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in the fields of geography, history, art, architecture, archaeology, sociology, economics, and other fields.

Credit: 3 semester-hours

SOCIAL STUDIES 481. *The West Indies*

This course consists of ten days of directed travel in five countries in the Caribbean region. Transportation is by air and private cars with overnight stops at the best hotels. Opportunities are given for study of geographic, historic, economic, and cultural phenomena in Puerto Rico (one day), Santo Domingo (two days), Haiti (two

days), Jamaica (two days), Cuba (two days), visiting San Juan, Cuidad Trujillo, San Cristobal, Port au Prince, Kenscoff, Kingston, Havana, and rural areas in all countries.

Credit: 2 semester-hours

SOCIAL STUDIES 484. *Gulf Coast and Lower Mississippi Valley*

This is a nine-day field-study course covering the Gulf Coast from Mobile to New Orleans. It also surveys the economic, geographic, and historical aspects of the lower Mississippi Valley visiting among other places Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

Credit can be given for only one of the following courses: Soc. St. 467 and 484.

Credit: 2 semester-hours

SOCIAL STUDIES 485. *Maritime Provinces of Canada*

This is a twenty-one day field study course covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspé. The route runs through Vermont and Quebec to the Gaspé. It covers Nova Scotia and Cape Breton Island thoroughly, including the spectacular Cabot Trail, and returns through Maine, New Hampshire, Massachusetts, and Connecticut. Among the places visited and topics studied are: Riviere du Loup; picturesque fishing villages along the river and Gulf of St. Lawrence; lumbering and pulp-wood operations; Gaspé; Perce with its bird sanctuary; Moncton, New Brunswick, with its tidal bore; St. John, New Brunswick, with its reversing falls; Truro; Digby; Grand Pre; Annapolis Royal; Lunenburg; Halifax; Sydney; Louisburg; Cape Breton Highlands National Park. The history of the conflicts between the French and the English for this territory, the varied geographical and scenic phenomena, and the customs and daily life of the French Canadian and English-speaking people of the region are observed.

Credit: 3 semester-hours

SOCIAL STUDIES 486. *World Survey*

This is a thirty-five day field-study course planned to give the student a comprehensive, though not detailed, vision of the kind of a world we live in with its varying culture patterns and problems. The fact that the globe can be circled and sampled in such a short time is in itself evidence of the necessity for a world point of view on the part of teachers. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in the Philippines; Hong Kong, and the Kowloon Peninsula in southeast China; Bangkok in Thailand; Calcutta, Delhi, Agra and Bombay in India; Cairo and Memphis in Egypt; Jerusalem and Damascus in the Holy Land; Baalbeck and Beirut; Istanbul; Athens, and Corinth; and Rome.

Credit: 4 semester-hours

BACKGROUND STUDIES IN AMERICAN LIFE

SOCIAL STUDIES 492A and B. *Studies in American Life—The East and the West*

These courses comprise a unit designed to give the student an integrated understanding of the United States as a cultural, historic, geographic, social and political unit and, at the same time, an appreciation of the regional differences which characterize American unity in diversity. It should be useful to those who have traveled, to those who intend to travel, and to those who, although they cannot travel, wish to broaden their knowledge of our country. The geography, the history, the literature, the art, the music, the architecture, the people, the manners and customs, the flora and fauna, the economic, social, and political problems, and the significant personalities of the regions studied are discussed and illustrated with slides, films, and other audio-visual materials. Either course may be taken without the other.

The subject matter of SOCIAL STUDIES 492A covers New England, the Central East, the South, and the Middle West east of the Mississippi River. The subject matter of SOCIAL STUDIES 492B deals with the regions west of the Mississippi, i. e., the Great Plains, the Mountain States, the Southwest, the Northwest, and California.

Credit: 2 semester-hours each

INSTITUTES AND WORKSHOPS

SOCIAL STUDIES 490A. *United Nations Institute*

This course covers four and one-half hours per day for ten consecutive days excluding Sunday. It consists of basic lectures on factual backgrounds by the instructor, supplementary lectures by visiting lecturers from the United Nations and other organizations, discussions, workshop and library projects, demonstrations of the use of audio-visual materials, and field trips to the United Nations. Included among the subjects studied are the national state system, war and peace, world organizations (past, present, and proposed), the national armaments problem, international law, the international police proposal, pacific methods of settling international disputes, and the outlook for international co-operation.

Credit: 3 semester-hours

SOCIAL STUDIES 490B. *The United Nations and American Foreign Policy*

The purpose of this course is to help provide an understanding of the United Nations in its operation as a basis for American foreign policy. In that the Charter of the United Nations forms the backbone of American cultural, economic, and military cooperation with other nations, its interpretation and the application of our aid to needy people open a wide area of disagreement within the nation. Following the principle that American foreign policy should rest upon an intelligent understanding on the part of the electorate and working within the framework of the policy of the State Board of Education with regard to controversial issues, the United Nations Institute deals with the strong as well as the weak aspects of this newly created world organization. This institute serves the needs of teachers of all grades, students of foreign policy, the public at large, as well as visitors from other lands who are here to study the ways of American democracy. It is available to students who have completed the requirements for SOCIAL STUDIES 490A, *United Nations Institute*, or the equivalent.

Credit: 3 semester-hours

SOCIAL STUDIES 490C. *The Specialized Agencies of the United Nations*

The purpose of this course is to give the student an opportunity to learn about the various activities of the specialized agencies of the United Nations. The course deals with the positive activities of the United Nations in the various areas of human welfare. Visiting lecturers from the agencies themselves and from areas of the world receiving such help are a regular part of the class work. Trips to the New York offices of these agencies and individual research make up the balance of the work for this course.

SOCIAL STUDIES 490A, *United Nations Institute*, or its equivalent is a prerequisite for this course.

Credit: 3 semester-hours

SOCIAL STUDIES 490D. *The United States and World Affairs*

The purpose of this course is to give the student an opportunity to make a thorough survey of the leading problems in world affairs. Visiting lecturers from agencies concerned with the problems of today's world supplement the basic information supplied by the regular members of the Institute staff. Included among the subjects studied are: Underdeveloped areas of the world, technical assistance, international trade and cultural interdependence. Special emphasis is placed on the relations of the United States with such areas of the world as the Far East, Eastern Europe, the Middle East, Western Europe, and Latin America.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to the conventional lectures, this course features the showing of the latest films in the field of world affairs, field trips to the United Nations and to foreign areas of New York, exhibits of teaching materials, demonstrations of teaching techniques and materials, folk singing, and folk dances suitable for classroom use.

Credit: 3 semester-hours

SOCIAL STUDIES 490E. *Latin America, A Survey*

The purpose of this course is to give the student an opportunity to make a thorough survey of Latin America. Visiting lecturers from agencies concerned with Latin American affairs supplement the basic information supplied by the regular members of the Institute staff. Included among the subjects studied are: Geographic setting and influences, pre-European cultures, exploration and settlement, independence, the Monroe Doctrine, economic colonialism, Pan-Americanism, present-day Latin America, United States relations with Latin America, and Latin America and the United Nations.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to conventional lectures, this Institute features the showing of the latest films on Latin America, field trips to the United Nations and Latin American centers of New York, exhibits of materials suitable for teaching, demonstrations of teaching techniques and materials, folk singing, and folk dances suitable for classroom use.

Credit: 3 semester-hours

SOCIAL STUDIES 490F. *Russia in the Modern World*

The purpose of this course is to give the students an opportunity to study the development of modern Russia and the impact of its emergence as a world power. Particular attention is devoted to the role played by the geographical and historical forces that influenced Soviet foreign policy. The course meets three hours a day for each of fifteen days. Visiting lecturers from agencies concerned with Russian affairs supplement the basic information supplied by the regular members of the Institute staff. Included among the topics studied are: The nature and source of Soviet power, land and people of the Soviet Union, the role of the Communist Party, United States relations with Russia, Russia in the United Nations, Russian interest in the Far East and the Middle East, and the Cold War.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to conventional lectures, this course features the showing of the latest films on the Soviet Union, field trips to New York City, exhibits of materials suitable for classroom use and demonstrations of teaching techniques.

Credit: 3 semester-hours

SOCIAL STUDIES 490G. *Western Europe at Mid-Century*

The free nations of Western Europe are examined for their influence upon world affairs as well as for the ways in which they are affected by developments on the international scene. They are studied as the point of East-West contact and as a center of East-West rivalry. Particular attention is paid to the changing status of Western European powers and to the geographical, economic, and historical forces which are bringing about this change. Included among the areas studied are: political and governmental institutions; geographic influences; intra-European cooperation; economic bases of politics and history; pertinent historical trends and developments; social and intellectual developments; and the role of tradition and provincialism. Among the nations considered are: the United Kingdom, France, the Benelux countries, West Germany, the Scandinavian countries, Italy, Portugal, Spain, and Ireland.

This course is designed primarily for teachers who feel the need for up-to-date background information and improved teaching materials and techniques for use in their classes. All teachers interested in world affairs are given the opportunity to build up a personal background of information and understanding. Background lectures, small study groups, field trips to New York City, films and exhibits of materials suitable for classroom use are included in the program. Spokesmen for the various national points of view supplement the basic information presented by the regular members of the Institute staff.

Credit: 3 semester-hours

SOCIAL STUDIES 491A. *Workshop in Citizenship Education, Part I*

The purpose of this workshop is to present a study of what has been done in some of the many projects in citizenship education throughout the country. Special emphasis is placed on the plans and materials developed by the Citizenship Education Project now being conducted by Teachers College, Columbia University, and financed by the Carnegie Corporation. Montclair was one of the eight teachers colleges cooperating in this project, and the College High School is a cooperating school. Consultants are invited in as needed. Attention is given to programs and practices already in use

in the schools, and advantage is taken of the state-wide project in collecting from the schools experiences in education for character and citizenship. New means for citizenship education are sought, and methods of evaluation are reviewed. Experience in the group processes essential to democratic action is provided. It is hoped especially to include in the workshop those who have been or may be serving as training teachers for Montclair student teachers, especially in the fields of social studies and English. Principals and administrators who want to join with others in learning how to make more effective the citizenship education in the schools with which they are connected are invited to participate. Each participant in the workshop works on actual plans for carrying out such education in the school and the classroom.

Credit: 2 semester-hours

SOCIAL STUDIES 491B. *Workshop in Citizenship Education, Part II*

Membership in this workshop course is limited to those who have completed SOCIAL STUDIES 491A, and participants in this advanced workshop meet and work with the members of the SOCIAL STUDIES 491A workshop. On the basis of previous experience, each member of the SOCIAL STUDIES 491B group is expected to work out several laboratory practices or similar projects for use in the classroom or the school.

Credit: 2 semester-hours

SOCIAL STUDIES 499. *Introduction to Chinese Culture*

A number of authorities introduce first-year students to the rise, growth, and maturing of Chinese civilization, as well as to the fundamental problems of China today, including the conflict of ideologies. The course is given in twelve days. Each day there are two hours of lectures in the morning; after lunch a period of forty-five minutes is devoted to informal talks including further discussion on Chinese music, philosophy, Chinese school days, festivals, and calligraphy. Some time is also given to the singing of Chinese songs and the showing of motion pictures. During the two-hour workshop period the students prepare their projects, teaching units, and background material under the direction of faculty members.

Credit: 3 semester-hours

SOCIAL STUDIES 496A. *The Chinese Society*

This course is an intensive study of the formation of the Chinese people, their collective life, and the interaction of natural and human forces with the resultant social organizations from early times to the present. Particular emphasis is placed upon the development of social institutions, including the family, labor guilds, educational systems, and religious institutions, as well as their transformation and mod-

ernization under the impact of different forces from the West. There are twenty-four hours of lectures in the morning, and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

SOCIAL STUDIES 496B. *China: The Evolution of a Nation*

This course is an intensive study of the Chinese civilization, the forces underlying the development of the national character of the Chinese people, their contacts and conflicts with other peoples and cultures from historical times to the present. Because of its voluminous material, this course does not attempt to cover the whole span of Chinese history, but it is an integrated presentation of the maturing of the Chinese people as a nation. There are twenty-four hours of lectures in the morning, and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

SOCIAL STUDIES 497. *Chinese Philosophy*

This course shows how the ancient philosophies, Confucianism, Taoism, Buddhism, Mohism, can be applied to the China of today and how they affect modern Chinese thought. There are twenty-four hours of lectures in the morning, and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*, or an equivalent course in philosophy

Credit: 3 semester-hours

SOCIAL STUDIES 498. *China and the Far East*

This course presents to the student a factual and up-to-date analysis of the forces that are operating in the Far East and shows how these forces may affect future developments in this critical area of the world. China, with its people as a key area in the Far East, is interpreted in terms of current economic, political, and cultural developments. Recognized experts from the various countries in the Far East present problems from the standpoint of their experience and background. The course itself is synthesized by a course director who is a serious student of China and its neighbors.

Credit: 3 semester-hours

FINE ARTS 414. *History of Chinese Art*

For a description of this course, see page 141.

Credit: 3 semester-hours

ENGLISH 459. *A Survey of Great Chinese Literature*

For a description of this course, see page 63.

Credit: 3 semester-hours

THE DEPARTMENT OF SPEECH

Speech education in the schools of New Jersey has received increasing recognition in recent years with the realization that effective oral communication is important to the achievement of self-realization, vocational competency, social effectiveness, and good citizenship. Additional programs of speech are being established to provide developmental and corrective work according to each student's needs. The effectiveness of these programs depends upon the sound and extensive preparation of master teachers who can organize and supervise speech programs and who can offer dynamic leadership in helping to integrate the speech program in the overall school curriculum.

The graduate program in speech allows qualified students to specialize in one of two areas of speech education: speech and dramatics, or speech and hearing rehabilitation.

It is expected that each graduate student will have at least one of the following goals for his work:

1. To be the director or supervisor of a speech education program in the elementary and secondary schools of a community.
2. To be further qualified as a speech therapist in schools and special institutions.
3. To increase his skill as a teacher of speech and dramatics in secondary schools.
4. To provide opportunities for the completion of requirements for certification in the state and in the national professional organization, the American Speech and Hearing Association.

In order to matriculate as a candidate for the Master of Arts degree in Speech, the applicant must have completed a minimum of eighteen semester-hours of course work, or the equivalent, from among the following areas:

Voice production; fundamentals of speech
Phonetics
Speech correction; speech pathology
Anatomy and physiology of the vocal and auditory mechanisms
Speech laboratory practice; clinical practicum in speech
Oral interpretation; choral speaking
Public speaking; group discussion

Each student must also be capable of setting a good example of acceptable speech. Each candidate will be interviewed by a speech faculty committee; and if any speech deficiencies are noted, the candidate must correct them prior to matriculation, or accept matriculation on the condition that such correction will be made one year before the granting of the degree.

REQUIREMENTS FOR THE A.M. DEGREE IN SPEECH

Upon admission to the graduate program in speech, the student must declare his area of specialization: (1) speech and dramatics, or (2) speech and hearing rehabilitation. Each student must spend at least one summer in full-time study in the seminar course in his area of specialization.

I. Professional Education Requirements S. H.

Education 503. <i>Methods and Instruments of Research</i>	2
Other education courses—to be chosen by the student in consultation with his adviser.	4
Total	6

II. Required of All Speech Majors

Speech 550. <i>Advanced Study of Voice and Speech Production</i>	3
Speech 592. <i>Areas and Techniques of Research in Speech and Dramatics</i> (3)	
or	3
Speech 593. <i>Areas and Techniques of Research in Speech and Hearing Rehabilitation</i> (3)	

III. Areas of Specialization

A. For Students Specializing in Speech and Dramatics

Speech 567. <i>Seminar in Dramatic Production</i>	6
Speech 449. <i>Advanced Public Speaking</i> —2 s. hrs.	
or	2 or 3
Speech 462. <i>Group Discussion and Leadership</i> —3 s. hrs.	
Speech 565. <i>Advanced Oral Interpretation</i>	2
One course in speech and hearing rehabilitation	2 or 3
Electives (Chosen by the student in consultation with his adviser.)	6 to 8
Total	20

or

B. For Students Specializing in Speech and Hearing Rehabilitation

Speech 535. <i>Seminar in Speech and Language Rehabilitation</i>	6
One course in audiology	2 or 3
Speech 411. <i>Advanced Speech Pathology</i> —3 s. hrs.	
or	3
Speech 412. <i>Speech Diagnosis</i> —3 s. hrs.	
One course in speech arts	2 or 3
Electives (Chosen by the student in consultation with his adviser.)	5 to 7
Total	20
Grand Total	32

IV. *Additional Requirements*

- A. Written comprehensive examination
- B. Oral comprehensive examination
- C. Oral demonstration of communication skill—The speech faculty will arrange a committee to observe each candidate as he participates in a professional activity or program of thirty minutes in length. The nature, time, and place of the activity will be of the student's choosing, prior to his final semester. It may be in the form of a speech at a Parent-Teacher Association meeting or at a professional convention, a reading, a dramatization, or any combination which demonstrates the candidate's ability to exemplify good speech, and to be effective before an audience.

GRADUATE COURSES

SPEECH 522. *Advanced Phonetics*

This course is designed for the advanced student who has a basic background in the science of speech sounds. Further ear training is emphasized in order to develop skill in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English, and sounds in foreign languages. Extensive practice is provided in the use of International Phonetic Alphabet sound symbols and modifiers. Additional study is devoted to the stress, phrasing, and intonation patterns used in speaking English, with some analysis made of these elements in other languages.

Credit: 2 semester-hours

SPEECH 531. *Advanced Audiology*

The purpose of this course is further to develop skills in administering tests for determining pure-frequency and speech reception thresholds. Emphasis is placed on evaluation and interpretation of test results and on the analysis of client histories. Principles and techniques of hearing and evaluation, measurement of recruitment, and tests for psychogenic deafness and malingering are studied. Consideration is also given to pre and post-surgical audiometry, and to the special problems of testing children. Demonstration and supervised practice sessions in pure-frequency and speech audiometry, and in EDR (Electrodermal Response) testing are provided.

Credit: 3 semester-hours

SPEECH 532. *Practicum in Speech Rehabilitation*

This course provides advanced students with the opportunities for the practical application of diagnostic and rehabilitative techniques with high-school students and adults who have major speech and language problems. Qualified students participate in specialized laboratory experiences which include planning and supervising speech therapy sessions providing rehabilitative services to individuals and small groups, interviewing applicants, and administering audiometric tests.

Credit: 2 semester-hours

SPEECH 533. *Supervising Speech Correction Programs*

This course is designed for the advanced student in speech correction who is interested in preparing for a position as supervisor or director of the speech-improvement program in a school or special center. Methods of organization and administration of the program are discussed. Emphasis is placed upon problems of screening, referral, speech-staff training and orientation, in service courses, parent and community relations, integration with other disciplines, and development of new materials for testing, teaching, and evaluating.

Credit: 2 semester-hours

SPEECH 534. *Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms*

This course is for advanced students in the speech sciences. The basic anatomy of the mechanisms of speech reception and expression is reviewed. Consideration is also given to the integrated functioning of the central nervous system, the automatic nervous system, and the endocrine system. The effects of abnormalities of structure and function of the speech and hearing processes are emphasized. Discussion includes the medical and surgical aspects of rehabilitation, and the hygiene of the ear, nose, and throat. Demonstrations and supervised laboratory dissections are included.

Credit: 3 semester-hours

SPEECH 535. *Seminar in Speech and Language Rehabilitation*

Graduate speech majors specializing in the speech sciences are required to devote one summer session to the study of speech and language disorders and to participate in the therapy program of the Speech and Hearing Center. The course meets for four hours a day, with the time equally divided between class discussion and practicum in speech rehabilitation. Emphasis is placed upon the diagnostic, therapeutic, and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology. A minimum of 100 clock hours of supervised teaching must be accumulated.

Credit: 6 semester-hours

SPEECH 550. *Advanced Study of Voice and Speech Production*

The study is made in this course of materials and methods used in the teaching of speech fundamentals on the junior-high and senior high-school levels. Review and further application of basic subject matter, including English and comparative phonetics, are included. Opportunities are provided for practice in improving or further developing personal voice and speech skills, in directing the practice of students with minor speech difficulties, and in phonetically transcribing speech from phonograph records or tape recordings. Some consideration is given to methods of helping students, for whom English is not a native language, to improve their voice and speech.

Credit: 3 semester-hours

SPEECH 563. *Scenery Design and Construction*

This course is designed to extend the advanced-speech student's knowledge in scenery design and construction techniques. Special emphasis is placed upon stage design as related to the play, the director, and the audience. The course of study includes a survey of the styles of design and the use of the perspective sketch and stage model in planning the stage setting. The application of stage construction techniques is used to demonstrate the necessity of scene design in planning the stage production. Each student is expected to design and plan the construction of scenery for a play appropriate for production in a secondary school.

Credit: 3 semester-hours

SPEECH 564. *History of the Theater*

This course is designed to give the advanced speech student a comprehensive view of the development of the theater from the Classic Greek drama through the Nineteenth Century. Special attention is placed upon plays and playwrights of the period, theater architecture, scenery, costuming, and styles of acting and presentation of each period. Course work includes oral reports, lectures, and classroom demonstrations. Advanced students may enroll with the consent of the instructor.

Credit: 2 semester-hours

SPEECH 565. *Advanced Oral Interpretation*

This course is designed to provide further study of techniques of reading aloud of poetry and prose. Extensive practice is provided in the analysis and presentation of various types of literary material (short story, ballad, narrative, sonnet, etc.) suitable for use in the classroom and for special programs.

Credit: 2 semester-hours

SPEECH 566. *Costume and Make-up for the Stage*

This course provides the advanced student with opportunities to design costumes and make-up for plays of various periods. Consideration is given to the use of materials, colors, and textures in achieving desired effects on the stage. Laboratory work in stage make-up is provided to develop skill in creating suitable visual characterizations.

Credit: 3 semester-hours

SPEECH 567. *Seminar in Dramatic Production*

This seminar is for advanced play-production students. It allows each member of the class to pursue projects in keeping with his own needs or interests in either the technical or directorial aspects of play production. When possible, supervisory assignments are made in connection with the current program of plays. The seminar meets four hours daily for individual project or laboratory activities, for evaluation of specific teaching problems in connection with the current plays, and for group analysis of typical production problems. Enrollment is open to matriculated graduate students in speech, or by permission of the instructor.

Credit: 6 semester-hours

SPEECH 590. *Problems in the Teaching of Speech*

This course is designed to present an analysis and investigation of the problems encountered in the speech classroom, and to survey the textbooks and teaching aids available to the teacher of speech on various grade levels. Consideration is also given to the problems of (1) motivation, (2) methodology, (3) evaluation procedures, and (4) co-curricular speech activities.

Credit: 3 semester-hours

SPEECH 591. *Organization and Administration of the School Speech Program*

This course is designed for the advanced student of speech education who is interested in the problems of organizing and administering a comprehensive speech program in a school system. Consideration is given to curriculum development, teacher-administration relationships, class scheduling, reports and records, in-service training, and integration of the speech program in the total school curriculum.

Credit: 2 semester-hours

SPEECH 592. *Areas and Techniques of Research in Speech and Dramatics*

This course is required of graduate speech majors who are specializing in speech and dramatics. Methods of research appropriate for studies in speech and dramatics are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research in speech and dramatics. Each student is required to prepare an outline for a research project and to develop a bibliography for the study.

Credit: 3 semester-hours

SPEECH 593. *Areas and Techniques of Research in Speech and Hearing Rehabilitation*

This course is required of graduate speech majors who are specializing in the speech sciences. Methods of research appropriate for studies in speech and hearing are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research in speech and hearing. Each student is required to prepare an outline for a research project and to develop a bibliography for the study.

Credit: 3 semester-hours

SENIOR-GRADUATE COURSES

SPEECH 410. *Speech Pathology*

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances including severe stuttering, dysphonia, laryngectomy, cleft-palate, cerebral palsy, and aphasia. Emphasis is placed upon methods of diagnosis, evaluation, and rehabilitation.

Credit: 3 semester-hours

SPEECH 411. *Advanced Speech Pathology*

The purpose of the course is to encourage further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers. In

addition to two hours of class lecture and discussion, students are expected to spend two hours a week, for twelve weeks, on a rotating internship basis at: (a) a cerebral palsy center, (b) a training class for the mentally retarded, (c) a rehabilitation center or Veterans Administration Hospital, and (d) a hospital speech therapy department. Special arrangements are made when offered in the summer session.

Prerequisite: SPEECH 410 or equivalent

Credit: 3 semester-hours

SPEECH 412. *Speech Diagnosis*

The purpose of this course is further to analyze and evaluate popularly employed techniques of speech diagnosis and therapy. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology to be used in providing speech rehabilitation services to children and adults with speech and language disorders is evolved. Attention is given to the application of speech arts activities, principles of learning, and principles of mental hygiene in the speech-therapy session.

Credit: 3 semester-hours

SPEECH 435. *Stagecraft*

This workshop course provides training in constructing and painting of scenery and lighting the stage. A minimum of twelve clock hours in the scene shop is required.

Credit: 2 semester-hours

SPEECH 436. *Fundamentals of Stage Lighting*

The purpose of this course is to analyze the functions of light on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the Memorial Auditorium at the College, which houses modern and flexible stage-lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditoriums in which they may work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course.

Prerequisite: SPEECH 105A or SPEECH 435 or permission of the instructor

Credit: 3 semester-hours

SPEECH 437. *Dramatic Production Workshop*

This course is designed for those students desiring a comprehensive introduction course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. Classes meet three hours daily, in addition to laboratory assignments in connection with the summer-theater program. The course may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a prerequisite to matriculation for the Master's degree in speech.

Credit: 4 semester-hours

SPEECH 448. *Choral Speaking*

As members of a speaking choir, students acquire skill in interpreting various forms of literature suitable for group treatment. Consideration is given to their use in the various grade levels in teaching. Students prepare a group of selections suitable for their particular interest and purpose.

Credit: 2 semester-hours

SPEECH 449. *Advanced Public Speaking*

This is an advanced course in the theory and practice of public speaking. It provides opportunity for training in the more complex speech skills, especially in the techniques of leadership in speech situations.

Prerequisite: SPEECH 204 or the equivalent

Credit: 2 semester-hours

SPEECH 456. *Play Direction*

This course covers the choosing and casting, as well as directing, of plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. Whenever possible, this play is given publicly before a student audience. This course complements SPEECH 435.

Credit: 2 semester-hours

SPEECH 457. *Directing the Assembly Program*

It is the purpose of this course to prepare students to organize and to conduct assembly programs and similar activities. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares a detailed script for one assembly or commencement program.

Credit: 2 semester-hours

SPEECH 461A. *Applied Speech Correction*

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy, and teach under supervision.

Credit: 2 semester-hours

SPEECH 461B. *Applied Speech Correction: Advanced*

Additional opportunities for practical experience with children and high-school students who have speech problems are provided in this course. Provisions are made for qualified students to participate in specialized laboratory experiences which include audiometric testing, planning and supervising speech therapy for small groups of children, demonstrating model lessons for beginning students, and interviewing applicants for admission to the laboratory.

Credit: 2 semester-hours

SPEECH 461C. *Advanced Practicum in Speech and Hearing*

This course provides students with further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations; (2) work with the parents of children who have speech disorders; and (3) assist the beginning student-speech therapist in planning and carrying out therapy sessions.

Prerequisite: Speech 461A and B

Credit: 2 semester-hours

SPEECH 462. *Group Discussion and Leadership*

Students are taught the principles of democratic discussion and methods for guiding the informal group conference, panel symposium, lecture, and debate forums. Frequent opportunities to apply these principles and methods are given through discussion of topics chosen by the class.

Credit: 3 semester-hours

SPEECH 463. *Audio-Visual Aids in Teaching Speech*

The aim of this course is to equip prospective teachers to understand the desirable characteristics; capabilities; and all possible uses of charts, models, projection equipment, and magnetic and disc recorders available for the teaching of speech. The distribution, cost, operation, servicing, and storing of instruments and of supplies are also considered.

Credit: 2 semester-hours

SPEECH 464. *Psychology of Oral Communication*

This course is divided into three major units: (1) speech and personal adjustment, (2) the psychology of children who have problems in oral communication in addition to their physical and/or emotional handicaps, and (3) programs and problems in the education and rehabilitation of handicapped children who have speech and/or hearing disorders. Consideration is given to ways in which psychologies of learning, psychoanalysis, and general semantics have influenced the areas of speech pathology and speech therapy.

Credit: 2 semester-hours

SPEECH 468. *Measurement of Hearing*

A comprehensive study of the measurement of hearing is made in this course with attention being given to the educational implications of impaired audition and deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism are considered as well as hearing tests, principles and techniques of screening tests, interpretation of test results, types and uses of hearing aids, and educational procedures for the habilitation of the hard-of-hearing or deaf child. Demonstrations and supervised practice in administering pure-tone audiometer tests are provided.

Credit: 3 semester-hours

SPEECH 469. *Auditory Rehabilitation*

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficiency in speech reading as a receptive language process are discussed. In addition, principles of auditory training are studied as means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

Credit: 2 semester-hours

SERVICE COURSES FOR NON-SPEECH MAJORS

The following courses may not be taken by speech majors. Students in other departments of the College may take them for graduate credit under certain conditions. Such students are advised to check with their advisers regarding enrolling in these courses.

SPEECH 454. *Training the Speaking Voice*

This is a course in the study of the problems of speech, the development of a pleasant speaking voice with precision in diction, and the application of speech skills to practical speaking situations.

Credit: 2 semester-hours

SPEECH 466. *Speech Development: Improvement and Re-education*

This course is intended for superintendents, principals, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found on the kindergarten, elementary, and secondary-school levels; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of setting up and integrating speech education in school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project.

Credit: 2 semester-hours

SPEECH 467. *Oral Interpretation for the Teacher*

This course is organized as a laboratory to help the teacher develop his potentialities in oral reading. Each student is given many opportunities to read aloud and to participate in informal critiques. Assistance is given in compiling a repertory of selections most useful in daily teaching.

Credit: 2 semester-hours

OTHER COURSES THAT MAY BE USED AS ELECTIVES

For more complete descriptions see the undergraduate catalog.

FINE ARTS 400. *Philosophy of Art*

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education.

Credit: 2 semester-hours

FINE ARTS 401. *Art Curriculum of Elementary and Secondary Schools*

This course is planned to give the student an opportunity to organize his learnings into a tentative curriculum of art and to test his thinking in relation to the best curriculum guides in current use.

Credit: 2 semester-hours

FINE ARTS 403A & 403B. *Print Making, I and II*

The many ways of making prints: etching, dry point, wood cuts, and wood engraving, lithography, silk screen, photograms, and photography are learned in personal production which emphasizes the relation of material, tool, and process. Adaptation of these professional media to classroom use is one aspect of this course. The work of masters in these various types of print making are studied in reproductions and in museum trips.

Credit: 2 semester-hours each

FINE ARTS 406. *Art Workshop*

The workshop is designed to allow the student to have a concentrated experience in an art form of his choice. Each student projects his own problem in consultation with, and under the direction of, a faculty member. In addition the student is expected to set up an exhibit of the work he has accomplished during his four years.

Credit: 4 semester-hours

FINE ARTS 408. *Creative Painting*

This course gives the student an opportunity to use the materials of the painter for personal creative experience. Through the use of oils, water colors, and other media, the student is encouraged to work on landscape, figure, and free imaginative composition. Emphasis is placed on individuality of expression, variety of subject matter, and experimentation. No previous art experience is necessary.

Credit: 2 semester-hours

FINE ARTS 414. *History of Chinese Art*

In this course the developments and distinguishing characteristics of the major arts of China are traced by specialists and are surveyed from the point of view of their historical developments. An historical survey of the development of Chinese art from the dawn of civilization to the present day is made which includes the role played by foreign influences such as the spreading of Buddhism and the Chinese influence on other parts of the world. There are twenty-four hours of lectures in the morning and round-table discussion and library work in the afternoon. During the afternoon workshop period the technique of Chinese painting is demonstrated. Although there is no prerequisite for this course, it is suggested that those who enroll should have some knowledge of art or have taken SOCIAL STUDIES 499, *Introduction to Chinese Culture*.

Credit: 3 semester-hours

FINE ARTS 415. *Designing in Native Materials*

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangement for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes become an exciting adventure.

Credit: 2 semester-hours

FINE ARTS 416. *Appreciation of Chinese Art*

This is an introductory course on Chinese art in its various aspects: its historical development; aesthetic principles; and various forms such as calligraphy, painting, sculpture, bronze and jade, pottery and porcelain, architecture, etc. Topics include the philosophical basis of Chinese art, nature in Chinese art, and symbolism in Chinese art. Each lecture is illustrated by photographs and lantern slides as well as demonstrations. Students have an opportunity to learn the elements of Chinese painting from widely recognized Chinese artists.

Credit: 3 semester-hours

FINE ARTS 420. *Sculpture I: General*

This course provides the student with studio experiences in three dimensional expression. A variety of materials are explored including clay, plaster, metal, plastics, stone, and wood. Sculptural methods such as modeling, direct carving, construction, and casting are experienced. Special emphasis is placed on those materials and methods

most applicable to the public school teaching program. In addition to the studio problems the student is required to complete text assignments and outside reading problems, make frequent museum and gallery visits, prepare written and oral reports on readings and visits, and spend additional time in designing.

Credit: 2 semester-hours

FINE ARTS 425. *Metalwork I: General*

This course introduces the student to the metals traditionally used in the shaping of useful articles and to the influence of both materials and construction on methods of design. It treats the relationships of structural and surface design as well as the techniques for developing both. It explores the role of the designer-craftsman in a technological society, the relationships of hand and machine arts, and the influence of the handicrafts on the development of taste. Research in these areas includes trips, reading, and discussion.

Credit: 2 semester-hours

FINE ARTS 430. *Drafting and Woodwork*

This course is designed as an introduction to the basic processes in designing in wood with the use of hand and power tools. Drafting the designed pieces is integrated with the total designing process and includes the use of drawing instruments and the making of working drawings.

Credit: 2 semester-hours

FINE ARTS 435. *Costume Design*

A study of the elements of art as they determine the designing of the costume is the content of this course. Draping and construction in materials are the design approaches used to show the necessity of designing the costume in terms of the individual.

Credit: 2 semester-hours

FINE ARTS 440. *Home Design and Community Planning*

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science, and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishing, model homes, well-planned communities are included in the course activities.

Credit: 2 semester-hours

FINE ARTS 445. *Life Drawing*

This course in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

Credit: 2 semester-hours

FINE ARTS 450. *Print Making I—Silk Screen Printing*

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master designs through the construction of necessary printing facilities and printing. Experiences include the use of tusche, glue, stencil lacquer, and photographic techniques.

Credit: 2 semester-hours

FINE ARTS 460. *Photography: A Contemporary Art Form*

The content of the course is predominantly creative, using the technical materials as a medium of expression and experimentation. The work of leading contemporary artists using photography as an art medium is studied.

Credit: 2 semester-hours

FINE ARTS 474A and B. *Arts and Crafts in Education, I and II*

Included in this course are workshop activities in the arts and crafts of the elementary and secondary school program. Painting, drawing, modeling, pottery, weaving, papier-mache, paper sculpture, school display techniques, lettering, wood, leather, plastics, metal work, and puppetry are materials and processes which are explored.

Credit: 2 semester-hours each

FINE ARTS 500. *Contemporary Art*

This course presents a survey of the major influences and trends in the development of painting, sculpture, and architecture of this century. The use of visual materials such as slides, art films, and reproductions supplement discussion and studio participation. This course is planned for students who wish to enlarge their general education in art and requires no technical competency.

Credit: 3 semester-hours

GEOGRAPHY 503. *Economic Geography of the United States and Canada*

A study is made of the agricultural, industrial, and commercial development of the United States and of the geographic factors that have contributed to that development.

Credit: 2 semester-hours

GEOGRAPHY 504. *Economic Geography of Europe*

This course constitutes a study of the economic development of the nations of Europe in relation to the environmental background and resources that have made Europe one of the world's leading continents.

Credit: 2 semester-hours

GEOGRAPHY 509. *Economic Geography of Asia*

This course constitutes a treatment of the economic and commercial development of the countries of Asia in relation to their natural environment.

Credit: 2 semester-hours

GEOGRAPHY 405. *Urban Geography*

The student is introduced to the complex forces that have been and are responsible for the intense concentration of political, social, and economic activities within a small area. This area is then analyzed from the point of view of its evolution, morphology, and function. The changing characteristics of our cities, suburbanization, city-service areas, and city-hinterland interrelationships are also investigated. Special emphasis is placed upon research methods and source materials.

Credit: 3 semester-hours

GEOGRAPHY 406. *Geology*

This course deals with the earth and its geographic, stratigraphic, and structural development throughout geologic time; the record of the evolution of life as interpreted through a study of rocks and fossils.

Credit: 2 semester-hours

GEOGRAPHY 408A and 408B. *Political Geography*

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustments between nations.

Credit: 2 semester-hours each

GEOGRAPHY 409. *Economic Geography of the British Isles*

A comprehensive treatment of the resources of the British Isles is given, and the influence of the natural environment upon the utilization of those resources in the economic, social, and political development of the British Empire is evaluated.

Credit: 2 semester-hours

GEOGRAPHY 410. *Economic Geography of Caribbean America*

This is a study and interpretation of the major and important minor economic areas of Caribbean America in relation to the natural environment. Attention is also given to the historical factors which have played a part in the economic and social life of the people.

Credit: 2 semester-hours

GEOGRAPHY 411. *Historical Geography of the United States*

This course provides an opportunity for students of history, geography, and related disciplines to become familiar with the major principles of historical geography. It emphasizes the geographic factors pertinent to an understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Particular attention is paid to source materials, to the cartography of specific times, and to geographical lore and thought.

Credit: 3 semester-hours

GEOGRAPHY 412. *Geography of Africa*

This course includes a topical and regional study of Africa. Special emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined critically in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

Credit: 3 semester-hours

GEOGRAPHY 413. *Economic Geography of South America*

This course constitutes a study of the influence of the natural environment upon production and utilization of resources in the economic, social, and political development of the various nations of South America.

Credit: 2 semester-hours

GEOGRAPHY 414A and 414B. *Advanced Economic Geography*

This course is a study of the influence of the physical environment upon the production of, the trade in, and the utilization of the important agricultural, forest, mineral and sea products, and the manufactured commodities of the world.

Credit: 2 semester-hours each

GEOGRAPHY 416. *Conservation of Natural Resources*

This course provide an opportunity for students of the social and physical sciences to study the natural resources of the United States. Exploitation and conservation are both stressed. Our major resources are reviewed in terms of use, needs, and future developments. Consideration is given to the growth of legal and social awareness of the need for conservation practices in America.

Credit: 3 semester-hours

GEOGRAPHY 418. *Regional Geography of North America*

This course constitutes a detailed regional treatment of the continent of North America. Emphasis is placed upon the human activities of the various regions in relation to their natural environment and the relations of the regions to each other. Attention is given to the techniques of presenting the material and the use of geographic tools in the treatment of the subject-matter.

Credit: 2 semester-hours

GEOGRAPHY 419. *Geography of the Soviet Union*

This course is designed as a regional analysis of the Soviet Union. It examines critically the physical and human aspects of Soviet geography. Particular emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 420. *Field Geography and Conservation*

This course constitutes a study of the relation between relief features of northern New Jersey, the location of natural resources and the way in which land use and population distribution follow these patterns. Emphasis is given to the reading and interpretation of topographical maps and aerial photographs and to a study of the United States Geological and Soil Surveys of this region. By means of an actual land-use survey the student comes to appreciate the problems of conservation as they grow out of man's use of natural resources.

Credit: 2 semester-hour

GEOGRAPHY 421. *Population Problems of the World*

An intensive examination of the factors which influence the present day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

Credit: 3 semester-hour

GEOGRAPHY 422. *Geography of the American Indian*

This course is designed to survey the culture of the American Indian (from the Ice Age to the Reservation) in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet for the first time, and culminates with discussion of the Indian problems of the present day. It serves to introduce the student to methods employed in interdisciplinary attacks upon cultural problems. The views of the geologist, archaeologist, cultural anthropologist, cultural historian, as well as the geographer are critically examined.

Credit: 3 semester-hours

GEOGRAPHY 423. *The Geography of Transportation*

An intensive examination of the principles of transportation geography is provided. The different methods of transportation are studied systematically with regard to their development and present-day role in regional development. The growth of international specialization and the resulting economic development are also considered.

Credit: 3 semester-hours

GEOGRAPHY 424. *Geography of New Jersey*

This course is a detailed topical and regional study of New Jersey. Physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relations with neighboring states are intensively studied. On the basis of the data thus examined an attempt is made to delineate the geographic regions of the state. Emphasis is placed throughout on the relationship between New Jersey's people and New Jersey's earth.

Credit: 3 semester-hours

GEOGRAPHY 425. *Geography of Exploration and Settlement*

This course is designed to survey the great age of exploration and settlement (1500-1900) of lands overseas inaugurated by the Columbian voyages. Its major themes are: knowledge concerning the lands of the earth, the unfolding of the world map, the type settlements erected by Europeans in distant lands. Special attention is given to motives for exploration, methods of navigation and travel, routes explored, and the cultural features marking European settlement.

Credit: 3 semester-hours

MUSIC 405. *Orchestra Conducting and Score Reading*

This course aims to develop skills in orchestra conducting and score reading. It includes a study of the particular type of ear training needed in conducting, the technique of the baton, score reading, and interpretation. A special feature of this course is the presentation of a large amount of musical examples taken from standard repertory which contain practically all technical and psychological problems which face the conductor. Practical experience in conducting is given in the College High School Orchestra and the College Orchestra.

Prerequisite: MUSIC 305

Credit: 2 semester-hours

MUSIC 406. *Epochs in Musical Development, Part III*

This course is a continuation of MUSIC 208 and makes a study of the late romantic period and the rise of modern music. It includes a study of the music of Richard Strauss, Bruckner, Prokofieff, Mahler, Debussy, Tschaiikowsky, Mussorgsky, Stravinsky, Sibelius, Schoenberg, Bartok, and Hindemith.

This course is professionalized for use in the teaching of music appreciation in the classroom.

Credit: 2 semester-hours

MUSIC 407. *The Development of the Opera*

This course deals with the origin, development, and characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools. The content of this course is related to the Saturday afternoon broadcasts from the Metropolitan Opera, New York City. Special attention is given to building an ear repertory of operatic music heard over the radio.

Credit: 2 semester-hours

MUSIC 408. *Wagner Music Dramas*

This course deals with the operas and music dramas of Richard Wagner. It includes a study of Wagner's artistic ideals and their application to his compositions.

Credit: 2 semester-hours

MUSIC 409. *Counterpoint*

This course aims to provide a practical treatment of counterpoint for music students. It includes analysis of the works of the Sixteenth Century masters of vocal polyphony with enough of original work to insure a grasp of the principles involved.

Prerequisite: MUSIC 202

Credit: 2 semester-hours

MUSIC 410. *Composition*

This course aims to develop the creative power of the student in the composition of small vocal and instrumental forms. Special attention is given to the functional aspects of composition in word setting, writing accompaniments, and improvisation.

Prerequisite: Music 202

Credit: 2 semester-hours

MUSIC 413. *Masters of the Symphony*

This course aims to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, and Brahms.

Credit: 2 semester-hours

MUSIC 414. *Modern Symphonic Forms*

This includes a study of the post-romantic symphonies of Bruckner, Mahler, Dvorak, Franck, Tchaikowsky, and Sibelius; the symphonic poems of Strauss, Smetana, and Debussy, and the orchestral suites of Rimsky-Korsakoff, Ravel, and Stravinsky.

Credit: 2 semester-hours

MUSIC 416. *Music in Modern Society*

This course aims to interpret the nature, function, and forms of music in modern society in terms of the social, political, and cultural forces which have shaped it. It includes a study of the music of the church, royal patrons of music, nationalism in music, music and politics, music and industry, and music and entertainment. Because of the social interpretation given music, this course is particularly recommended to majors in the social studies.

Credit: 2 semester-hours

MUSIC 418. *Music of Russia*

This course provides a survey of Russian music from the Czarist regime to the modern Soviet. It aims to interpret Russian music in terms of the social, political, and cultural forces which have shaped it.

Credit: 2 semester-hours

MUSIC 420. *The Art Song*

This course provides a survey of the art song and includes a detailed study of the art songs of Beethoven, Schubert, Schumann, Brahms, Wolf, and Strauss. Special attention is given to the relation of music and poetry.

Credit: 2 semester-hours

MUSIC 422. *Chamber Music*

This course provides a survey of chamber music and includes a detailed study of the string trio, quartet, and quintet by classic, romantic, and modern composers. It includes the works of Mozart, Haydn, Beethoven, Schubert, Brahms, Debussy, Bartok, and Schoenberg. The content of this course is related to the current musical season in New York.

Credit: 2 semester-hours

MUSIC 423. *Choral Masterworks*

This course provides a survey of choral masterworks from Palestrina to Stravinsky. It includes a detailed study of Bach's *B Minor Mass*, *St. Matthew Passion*, Handel's *Messiah*, Beethoven's *Missa Solemnis*; Mendelssohn's *Elijah*; Verdi's *Requiem* and other great choral works. The content of this course is related to the current musical season in New York City.

Credit: 2 semester-hours

MUSIC 424. *A Survey of Wind Instrument Music*

This course includes music for full band, small ensembles, and solos with emphasis on literature available for brass and wood-wind players in high school. A laboratory band as well as numerous small ensemble groups are formed by members of the class so that performance of all music under consideration is possible. Special attention is given the music originally composed for wind instruments. New music from all publishers is available for examination and evaluation.

Credit: 4 semester-hours

MUSIC 425. *Music of the Romantic Period*

This course deals with the romantic spirit in music as expressed in the works of Schubert, Schumann, Mendelssohn, Chopin, Berlioz, Liszt, and others. It includes a study of program music, piano and song literature, and the rise of national schools of musical composition. Representative works are studied through performance, recordings, and radio listening. Special attention is given to parallel aspects of Romanticism in literature and the visual arts.

Credit: 2 semester-hours

MUSIC 426. *Survey of Music Literature*

This is a survey course in Music Literature and includes a study of folk song, art song, oratorio, opera, idealized dance forms, instrumental suite, sonata, symphony, and symphonic poem. Abundant use of musical illustration, directed listening, and music making acquaints

the student with great masterpieces of music which should be the possession of every generally cultured person. This course is designed for the general student and aims to make intelligent and appreciative consumers of music. It is a non-technical course and attempts to make intelligent and appreciative radio-listeners and concert goers. Special attention is given to the relation of music to English literature and the social studies.

Credit: 2 semester-hours

MUSIC 428. *Music of Twelve Great Nations*

This course aims to increase understanding among people through a study of the folk and related art music of twelve great nations. Special attention is given to the social, economic, political, and cultural backgrounds of the music of these nations. Because of the social implications of this music this course is recommended particularly to teachers of the social studies. Musical illustrations are given at the piano, through group singing, and through recordings.

Credit: 2 semester-hours

MUSIC 429. *A Cappella Choir and Choral Conducting*

This course deals with the theory and practice of the *a cappella* choir. It includes a study of the principles of group tone production, phonetics as related to singing, tuning, posture, techniques of choral conducting, interpretation, and score reading. A feature of this course is the study of a selected list of choral literature suitable for use in school, church, and community. Outstanding students are given an opportunity to conduct the College A Cappella Choir.

Prerequisite: Music 301

Credit: 2 semester-hours

MUSIC 460. *Musical Studies in Europe*

This field-study course gives an opportunity to study by direct observation major European musical events of the summer season together with visits to famous places in the history of music. Beginning on July 2nd the tour extends to September 3rd covering the countries of France, Germany, Austria, Switzerland, the Netherlands, and Italy. Among many other things opportunities are provided to attend the Richard Wagner Festival in Bayreuth and the Salzburg Musical Festival and to visit the musical shrines and museums in Vienna and the LaScala Opera House and museum in Milan. Famous places such as London, Paris, Rome, Florence, Venice, Amsterdam, Frankfurt, Stuttgart, and Lucerne are included in the itinerary. Students who are registered for credit are required to present a written report at the end of the trip.

Credit: 6 semester-hours

MUSIC 462. *Music and the Related Arts*

This course deals with the relation of music to painting, literature and the dance. It includes a study of aesthetic principles common to these arts and makes wide application in music, painting, literature, and the dance.

This course consists of three parts: Music and painting, music and literature, and music and the dance.

Credit: 2 semester-hours

MUSIC 490. *Survey of Choral Materials for Use in Public Schools*

This course provides a survey of the choral repertoire for accompanied and a capella groups, for changed, unchanged, changing, and mixed voices. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances, are an integral part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire. The course also includes historical and stylistic characteristics of the choral repertoire. Materials for small groups as well as the large ones are studied.

Prerequisites: MUSIC 301 and MUSIC 429 or their equivalents

Credit: 2 semester-hours

MUSIC 491. *Methods and Materials for Teaching Woodwind Instruments*

This course covers the pedagogy of all the woodwind instruments: flute, oboe, clarinet, bassoon, and saxophone. Attention is given to the problems of teaching individual students and to class procedures. Demonstration lessons, with criticism by instructor and students are provided. Woodwind literature is presented in all aspects, including study materials, solos, and ensemble music. Equipment is studied with reference to the selection, purchase, care, and adjustment of all woodwind instruments, mouthpieces, and reeds.

Credit: 2 semester-hours

MUSIC 499A. *Problems in the Teaching of School Music*

This is a post-student teaching course. It aims to (1) evaluate student-teaching experiences; (2) give an opportunity to the student to share with his classmates the problems encountered in student teaching and to seek a possible solution for the same; (3) meet shortages in teacher preparation not provided for in previous courses; (4) give the student a unified view of school music education before he enters the teaching field. The content of this course is determined largely by the expressed needs of the students.

Credit: 2 semester-hours

MUSIC 499B. *Workshop in School Music*

This course is designed primarily for music teachers-in-service who wish to work out projects for use in their respective schools. The content of this course is determined by needs in the field. It may include folk song dramatizations, small vocal and instrumental ensembles, the integration of music with other subjects in the curriculum, music for boys, visual aids in music pageants, festivals, and materials for special programs. This course provides the teacher with a number of units of work suitable for classroom use.

Credit: 2 semester-hours

HEALTH EDUCATION 401. *Methods and Materials in Health Education*

This course prepares the teacher to assume the responsibility for organizing and conducting a program of health instruction. The coordination of health with other subject-matter fields and the evaluation of textbooks and audio-visual materials are given special consideration.

Credit: 2 semester-hours

HEALTH EDUCATION 407. *Prevention and Care of Athletic Injuries*

This is a lecture and laboratory course designed to acquaint the student with ways to prevent and to care for the common injuries sustained in athletics.

Credit: 2 semester-hours

HEALTH EDUCATION 408. *Driver Education****Part I***

This part consists of a minimum of 40 hours of class recitations and discussions for which home reading and study have been assigned. The following topics are included: (1) history and development of driver education and training programs; (2) objectives of driver education; (3) local, state, and national traffic safety programs; (4) driver qualifications; (5) psycho-physical testing; (6) curriculum content of school courses in driver education and training; (7) construction, operation, and maintenance of automobiles; (8) traffic laws and driver licensing; (9) traffic engineering; (10) pedestrian education and protection; (11) equipment for teaching driver education; (12) liability, costs, and insurance; (13) planning driver education as a part of the daily program of the high school; (14) public relations; (15) records and reports; and (16) visual aids in teaching driver education.

Part II

This part consists of a minimum of 20 hours devoted to the following: (1) behind-the-wheel instruction; (2) demonstrations and student-teacher practice in the car; and (3) road tests in traffic. Home reading and study are required in preparation for these projects.

Prerequisite: License to drive a car with three years of driving experience with satisfactory driving record

Credit: 3 semester-hours

HEALTH EDUCATION 411. *School Health Services*

The student is familiarized with the health services available in the school. The part which the teacher plays in coordinating his activities with the school medical staff is emphasized.

Credit: 2 semester-hours

PHYSICAL EDUCATION 404. *Tests and Measurements in Physical Education*

This course is designed to acquaint students majoring in physical education with the history of measurement and evaluation in this field and to understand current trends and practices. Various tests in general qualities and traits relating to motor performance and tests relating to sports skills are presented to and administered by the students. Test evaluation and construction of written test questions are discussed. Methods of treating statistical data relating to physical education are presented.

Credit: 2 semester-hours

PHYSICAL EDUCATION 405. *Methods and Materials of Physical Education in the Secondary Schools*

Analysis of the program of physical education in the secondary school; criteria for the selection and grade placement of activity; consideration of method and teaching techniques; construction of teaching units and lesson plans; and problems relating to program planning, time allotment, facilities, sources of material, and program evaluation constitute the content of this course.

Credit: 2 semester-hours

PHYSICAL EDUCATION 409. *Organization and Administration of Physical Education*

The details of organizing the units of the physical education programs are discussed. Various topics, such as legislation, financing, curriculum construction, grading, excuses, plant facilities, supplies and equipment, and office management are considered.

Credit: 2 semester-hours

PHYSICAL EDUCATION 410. *Water Safety and First Aid*

This course includes intensive instruction in swimming, diving, water sports, boating, canoeing, water safety, and first aid. Students can qualify for Red Cross certificates during this course.

Credit: 2 semester-hours

PHYSICAL EDUCATION 411. *Organization and Administration of Athletics*

The purpose of the course is to offer practical suggestions and aids for the managing of affairs of an athletic program to those who expect to become teachers, supervisors, and directors of physical education.

The items discussed include athletic eligibility, management, equipment, awards, finances, budgets, safety, maintenance, planning of facilities, junior and senior high school athletics, and current athletic trends.

Credit: 2 semester-hours

PHYSICAL EDUCATION 412. *Organization and Administration of Recreation*

This course is designed to develop an understanding of the philosophy, scope and values of recreation in our contemporary life. Program planning, suitable activities for various age levels, and publicity and promotion are discussed. There are two hours of lecture-recitation per week.

Credit: 2 semester-hours

THE NEW JERSEY STATE SCHOOL OF CONSERVATION

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Credit for the courses given at the New Jersey State School of Conservation may be applied toward the Master's degree at the New Jersey State Colleges, subject to approval in advance by the institution concerned. Students are advised to check with their advisers relative to the application of these credits towards graduate degrees.

The following courses may be offered at the New Jersey State School of Conservation. For complete course descriptions, please refer to the departmental write-ups appearing in this bulletin. Special descriptive announcements may also be had by writing to the New Jersey State School of Conservation, Branchville, New Jersey.

FINE ARTS DEPARTMENT

Fine Arts 415. *School Arts and Crafts with Native Materials*

GEOGRAPHY DEPARTMENT

Geography 420. *Field Geography and Conservation*

INDUSTRIAL ARTS DEPARTMENT

Industrial Arts 442. *Conservation of Basic Industrial Materials*

Industrial Arts 443. *The Use of Basic Industrial Materials in Industry*

EDUCATION DEPARTMENT

Education 440. *Camping Education*

Education 441. *Conservation Education*

Education 442. *Practicum in Camp Leadership*

Education 444. *Practicum in Conservation Education*

Education 480. *Field Science for Elementary Teachers*

Education 539. *Guidance in the Elementary School*

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

Physical Education 410. *Water Safety and First Aid*

SCIENCE DEPARTMENT

- Science 405. *Field and Laboratory Studies in Science*
- Science 411. *Problems in Field Studies in Science*
- Science 412. *Field Studies in Science: Biological*
- Science 413. *Field Studies in Science: Physical*
- Science 414. *Conservation of Plants and Animals*
- Science 415. *Conservation of Soil and Water*
- Science 419. *Field Science and Conservation*
- Science 420. *Water Supply and Conservation Problems*

SOCIAL STUDIES DEPARTMENT

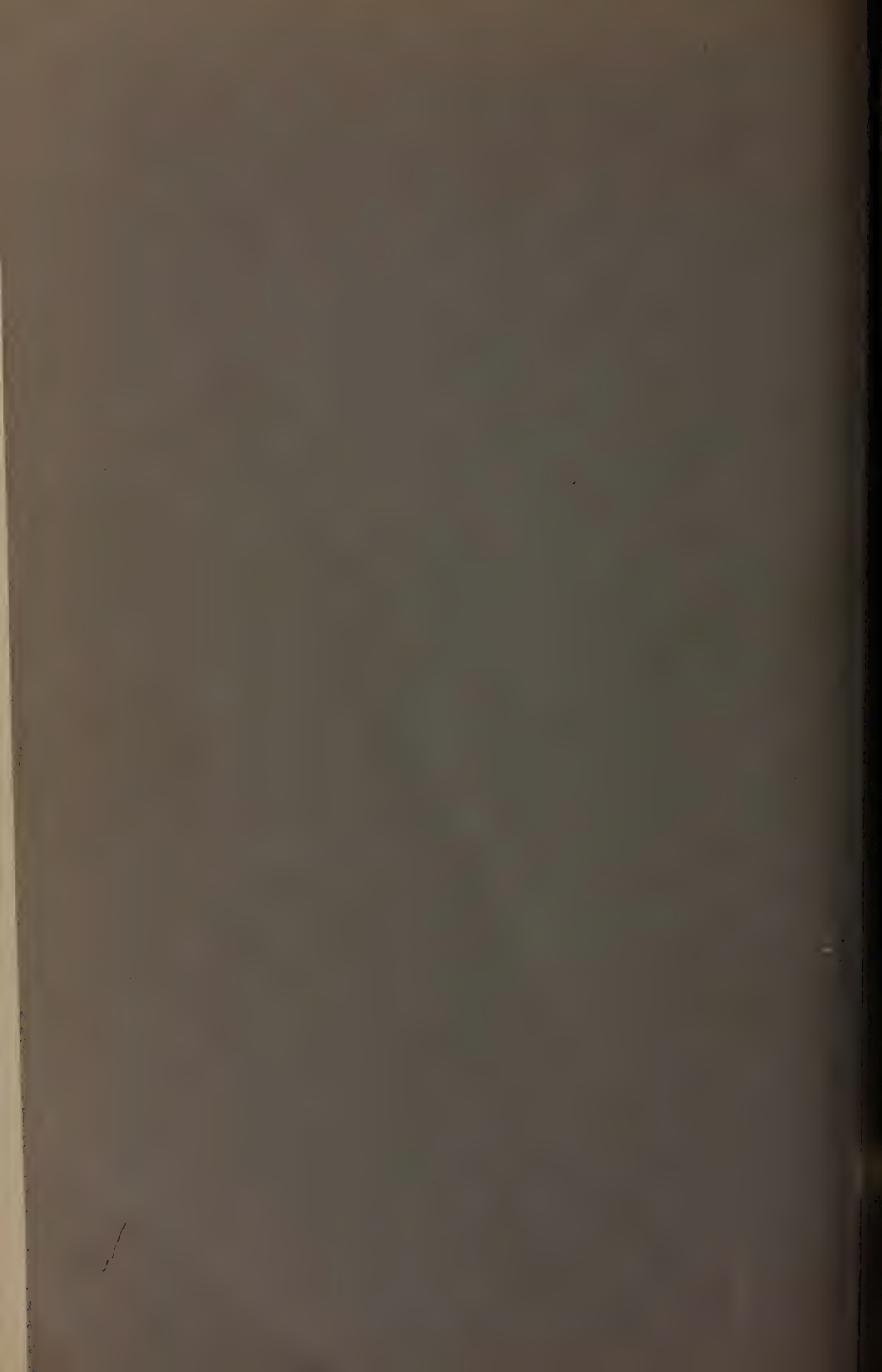
- Social Studies 477. *Rural Sociology*
- Social Studies 482. *Conservation and Rural Economic Life*
- Social Studies 494. *Social Studies and Conservation*

INDEX

	PAGE
Administration	5
Montclair State College	5
Administrative Officers—Graduate Division	5
Graduate Council	5
State Officials	5
Assistant Commissioner for Higher Education	5
Commissioner for Higher Education	5
Director of Teacher Education and Certification	5
State Board of Education	5
Administration of Graduate Division	10
Admission and Matriculation for the Master's Degree	13
Matriculation procedures	13
Requirements for matriculation	13
Admission to the Graduate Division	14
Types of Admission	14
Admission of Veterans	14
Procedures	14
Application for Conferment of Degree	16
Business Education Department	21
Course Offerings	23
Graduate Courses	23
Senior-Graduate Courses	27
Graduate Program of Studies	22
Master of Arts Degree in Business Education	22
Organization of Department	21
Certification Students	12
General Procedures	12
Master's Degree	12
Student Teaching	12
Course Numbering	15
Implications	15
Education Department	31
Course Offerings	33
Graduate Courses	33
Senior-Graduate Courses	44
Course Requirements for the A.M. Degree in:	
Administration and Supervision	31
Personnel and Guidance	32
Organization of Department	31
English Department	51
Course Offerings	53
Graduate Courses	53
Senior-Graduate Courses	61
Organization of Department	51
Requirements for Graduate Study in the English Department	51
Faculty	6
Adjunct Faculty	7
Graduate Faculty	6
Library and Auxiliary Services	7
Fees	17
Fine Arts Courses	140
Foreign Language Department	64
Graduate Program of Studies	64
Organization of Department	64

	PAGE
General Restrictions	17
Geography Courses	143
Health Education Courses	153
History of College	9
Industrial Arts Department	65
Course Offerings	67
Graduate Courses	67
Senior-Graduate Courses	69
Graduate Program of Studies	65
Master of Arts Degree in Industrial Arts Education	65
Organization of Department	65
Library Facilities	10
Living Accommodations for Graduate Students	10
Location of College	9
Master's Degree Major Areas	19
Master's Thesis	18
Procedure and Form for Thesis Writing	18
Mathematics Department	72
Course Offerings	74
Graduate Courses	74
Senior-Graduate Courses	81
Organization of Department	72
Requirements in Mathematics Department	72
Music Courses	148
New Jersey State School of Conservation	156
Organization	156
Course Offerings	156
Organization of College	11
Part-Time and Extension Division	11
Regular Undergraduate Division	11
Other Courses That May Be Used as Electives	140
Fine Arts Courses	140
Geography Courses	143
Health Education Courses	153
Music Courses	148
Physical Education Courses	154
Physical Education Courses	154
Professional and Academic Status of College	20
Accreditation	20
Purposes of the College	11
Service to Certification Students	11
Service to Graduate Students	11
Service to Undergraduate Students	11
Rating System	17
Grades	17
Requirements for the A.M. Degree	15
Comprehensive Departmental Examination	16
Credit-hours—Total	15
Education Courses	15
Level of Courses	16
Major Field	15
Prerequisites	15
Certification	15
Undergraduate Major Field	15
Research	16
Residence	16
Scholastic Average	16
Thesis	16
Time Limit	16
Research	18
Residence Requirements for Master's Degree	14

	PAGE
Science Department	84
Course Offerings	86
Biology	86
Graduate Courses	86
Senior-Graduate Courses	87
Chemistry	89
Graduate Courses	89
Senior-Graduate Courses	90
Physics	93
Graduate Courses	93
Senior-Graduate Courses	95
Science	98
Graduate Courses	98
Senior-Graduate Courses	98
Organization of Department	84
Requirements for the A.M. Degree in Science	85
Service Charges	17
Social Studies Department	102
Course Offerings	104
Graduate Courses	104
Senior-Graduate Courses	107
The Americas	111
Ancient and Medieval History	107
Background Studies in American Life	121
Economics	113
Field Studies in American Life	117
Institutes and Workshops	121
International Affairs	112
Modern European History	108
Philosophy	117
Political Science	116
Sociology	114
United States History	109
Organization of Department	102
Requirements in the Social Studies Department	102
Speech Department	128
Course Offerings	130
Graduate Courses	130
Senior-Graduate Courses	134
Organization of Department	128
Requirements for the A.M. Degree in Speech	129
Student Load	15
Transfer of Credits for Master's Degree	14

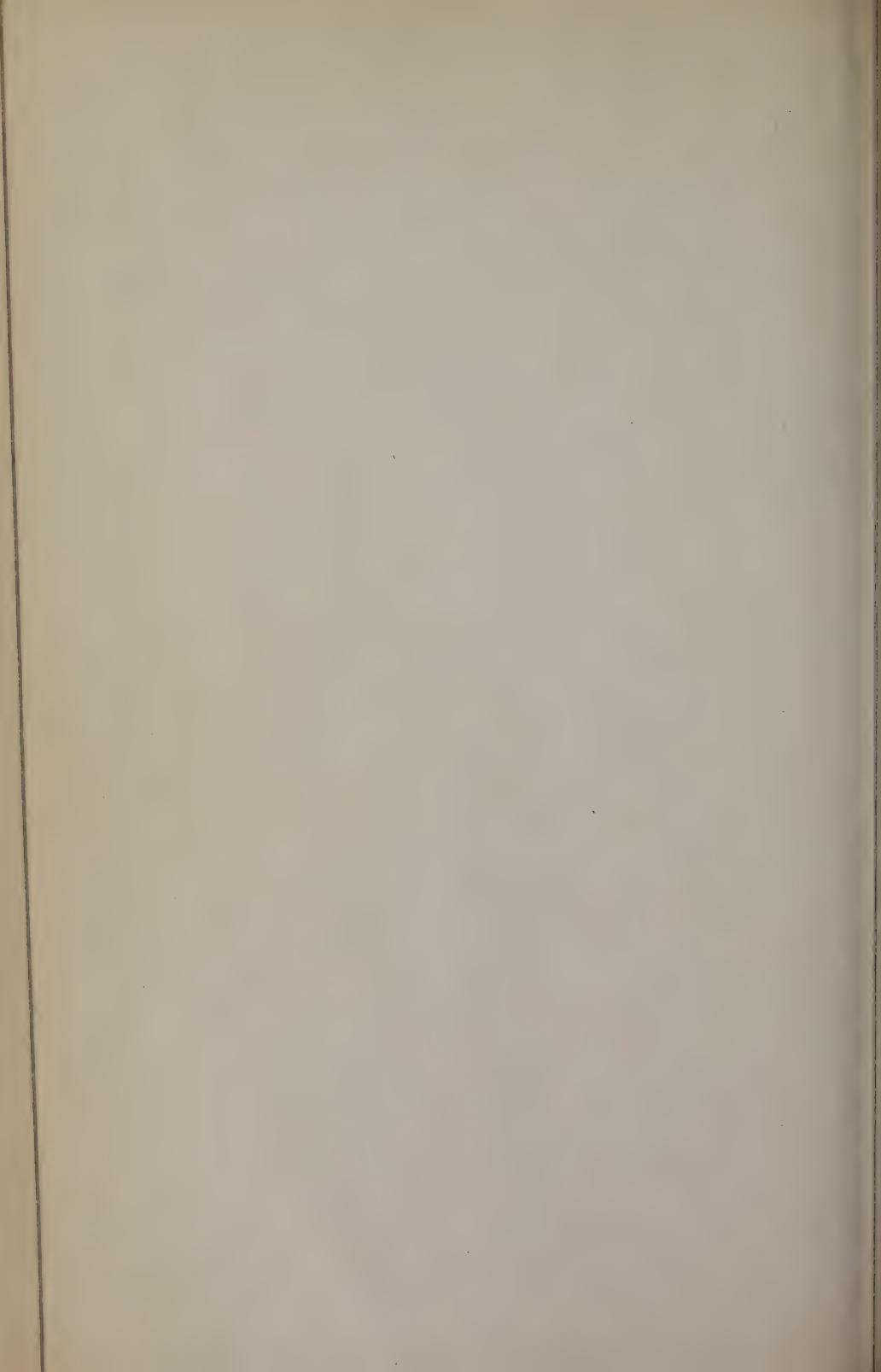


MONTCLAIR STATE COLLEGE

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1960-62

undergraduate bulletin



- 1 MEN'S DORMITORY
- 2 RECREATION LODGE
- 3 MEMORIAL AUDITORIUM
- 4 MATH - SCIENCE
- 5 HOME ECONOMICS
- 6 FINE & INDUSTRIAL ARTS
- 7 STUDENT LIFE
- 8 DINING HALL
- 9 TEMPORARY MUSIC BUILDING
- 10 COLLEGE HIGH SCHOOL
- 11 TEMPORARY BUILDINGS
- 12 AMPHITHEATRE
- 13 TEMPORARY BUILDING
- 14 ADMINISTRATION BUILDING
- 15 GARAGES
- 16 HEATING PLANT
- 17 HOME MANAGEMENT HOUSE
- 18 RUSS HALL
- 19 CHAPIN HALL
- 20 GYMNASIUM







Memorial Auditorium — Student Life — Food Services Building

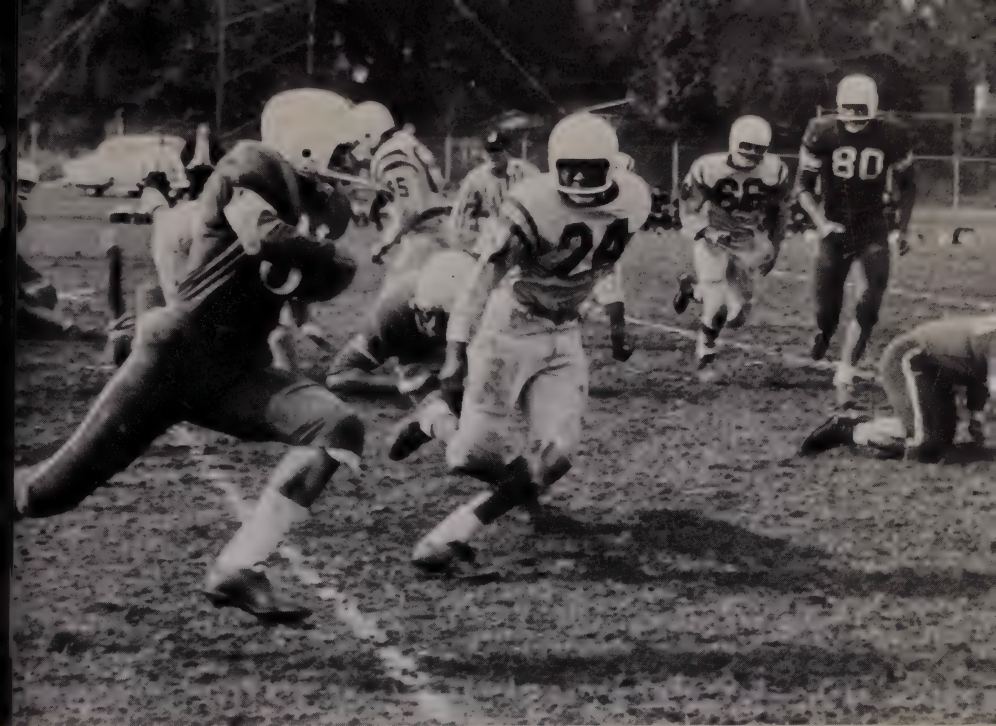
Some Fast Action on the Track



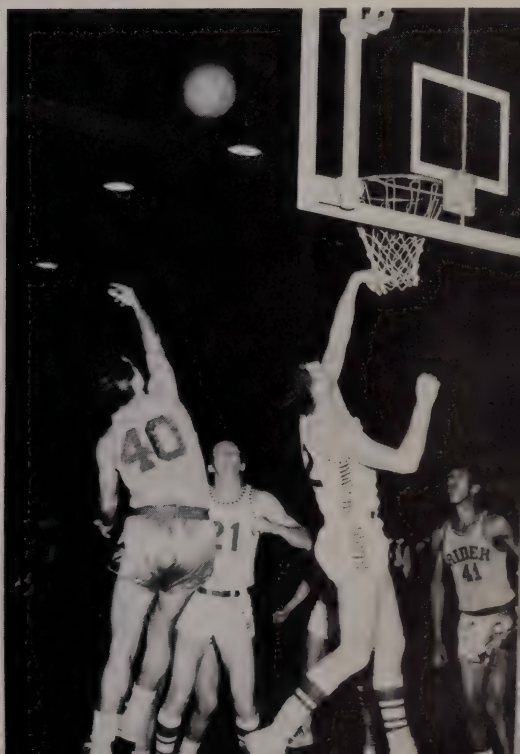


Concentration on Work — Indoors and Outdoors





Some Moments of Action in Men's Athletics





Two Ways to use Blades

Foreign Language Festival





Listening to Popular Music

A Problem in Mechanics





A Peaceful Hour on the Mall

Commencement — The Climax of it All



Bulletin of Information

AND

Catalog of Courses

1960-1962

MONTCLAIR STATE COLLEGE

MONTCLAIR

NEW JERSEY

VOLUME 53

NUMBER 1

MONTCLAIR STATE COLLEGE

COLLEGE CALENDAR—1960-1961 and 1961-1962

First Semester 1960-1961

September 10	Freshman Orientation
September 12-14	Registration
September 15	Classes Begin
September 27	Fall Convocation
November 10-12	Faculty Institute - No Classes
November 24-26	Thanksgiving Recess - Begins at close of College day on November 23
December 19	Christmas Recess Begins
January 3	Classes Resume
January 19	End of First Semester

Second Semester 1960-1961

January 25, 26, 27	Registration
January 30	Classes Begin
March 31	Good Friday - No Classes
April 3	Easter Monday - No Classes
April 3-8	Spring Recess
May 30	Memorial Day - No Classes
June 4	Baccalaureate
June 8	Commencement

First Semester 1961-1962

September 9	Freshman Orientation
September 11-13	Registration
September 14	Classes Begin
November 9-11	Faculty Institute - No Classes
November 23-25	Thanksgiving Recess
December 18	Christmas Recess Begins
January 1	New Year's Day - No Classes
January 2	Classes Resume
January 18	End of First Semester

Second Semester 1961-1962

January 24, 25, 26	Registration
January 29	Classes Begin
April 2-7	Spring Recess
April 20	Good Friday - No Classes
May 30	Memorial Day - No Classes
June 3	Baccalaureate
June 7	Commencement

TABLE OF CONTENTS

College Calendar—1960-1961 and 1961-1962	2	Montclair State College Development Fund	31
State Officials	5	Administrative Organization	31
State Board of Education	5	Instructional Division	32
Commissioner of Education	5	Personnel Division	32
Assistant Commissioner for Higher Education	5	Business Division	32
Director of Teacher Education and Certification	5	Library	32
College Administration	5	Bureau of Field Studies	33
Faculty	7	New Jersey State School of Conservation	33
Part-Time Faculty Members in Special Fields	18	Graduate Division	33
Library Staff	19	Offerings for Teachers-in-Service	34
Health Services	19	Part-Time and Extension Courses	34
Secretarial and Clerical Assistants	19	Summer Session	35
Faculty-Student Cooperative, Inc.	20		
PART I—GENERAL INFORMATI- TION	21	PART II—STUDENT PERSONNEL AND ACTIVITIES	36
Purposes	21	Student Interests and Activities	36
Philosophy	21	General Citizenship	36
Accreditation	22	Student Government Association	36
History of Montclair State College	22	Orientation of New Students	36
Location	23	Music and Art	37
Grounds and Buildings	24	Drama and Theater Productions	37
Expenses	24	Assembly Programs	37
Faculty-Student Cooperative Associ- ation	25	Student Exchange with French and Spanish-Speaking Countries	38
College Book Store	25	College Athletics	38
Food Service	25	Student Publications	38
Gifts	26	Dormitory Life	38
Admissions	26	Social Activities	39
I Admission to the Freshman Class	26	Honor Societies, Fraternities, Sororities, and Clubs	39
A. Applications	26	Who's Who in American Universi- ties and Colleges	39
B. Entrance Examinations	26	Student Personnel Services	39
C. Academic Requirements for Admission	27	Student Personnel Division	39
D. Special Requirements for Admission	28	Student Counseling and Advisement	39
E. Freshman Honors Sections	29	Attendance and Absences	39
II Admission as an Undergraduate Transfer Student	29	Veterans Counseling	40
III Admission to the Graduate Division	30	Health Services	40
Placement Service	30	Student Insurance	40
Alumni Association	31	Parking	41
		Scholarships and Loans	41
		State Scholarships	41
		Work Scholarships	41
		National Defense Student Loan Program	42

New Jersey Bell Telephone Company Scholarships	42	General Education	50
Radio Corporation of America Scholarships	42	Group I Social Studies	51
Edward Russ Scholarship Fund	42	Group II Humanities	51
Chapin Memorial Fund	42	Group III Science and Mathematics	53
John C. Stone Scholarship	42	Group IV Mental and Physical Health	54
Margaret B. Holz Fund for Student Exchange	43	The Department of Education	55
Mark Andrews Scholarship Fund	43	Organization and Activities	55
Field Studies Fund	43	Student Teaching	57
Clarence O.S. Howe Memorial Organ Fund	43	Supervision of Student-Teaching	57
Part-Time Employment Service	43	Required Courses	57
PART III — THE COLLEGE CURRICULA	44	The First Year	57
Fields of Instruction	44	The Second Year	58
Professional-Cultural Background (General Education)	45	The Third Year	58
Professional Subject Matter (Specialization)	45	The Fourth Year	59
Professional Education — Basic and Specialized	46	Education Electives	59
Summary of Course Requirements for The Bachelor of Arts Degree	46	Other Courses in Education	61
The Laboratory School	47	Elementary Education Courses	65
The College High School	47	Professional Subject-Matter Courses	66
Credits	47	Fields of Specialization	66
Rating System	48	The Department of Business Education	66
Degree and Certificate	48	The Department of English	78
Weighted Scores	48	The Department of Fine Arts	86
Scholastic Honors	48	The Department of Foreign Languages	95
Requirements for Graduation and Bachelor of Arts Degree	49	Beginning Languages	97
Scholastic Standards	49	French	99
Grade Reports	49	The German Minor	103
Probation	49	Latin	104
Honors Program	50	Spanish	107
Professional Background Courses	50	Language	111
		The Department of Home Economics	113
		The Department of Industrial Arts	122
		The Department of Mathematics	128
		The Department of Music	137
		Panzer School of Physical Education and Hygiene	154
		The Department of Science	167
		The Department of The Social Studies	186
		The Department of Speech	210
		The Department of Geography	220

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GEORGE E. SALT, A.M.

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North Central College, Naperville, Illinois, A.B.; Northwestern University, Evanston, Illinois, A.M.

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B. ERNEST SHORE, A.M. (on leave of absence—1960-1961)

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PETER P. STAPAY, Ed.M.

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Teachers College, Columbia University, New York, N. Y., B.S., A.M.; Syracuse University, Syracuse, New York, M.S.

RALPH WALTER, Ed.D.

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BENJAMIN F. WILKES, M.S.

Assistant Professor of Music

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RICHARD W. WILLING, Ed.D.

Associate Professor of Business Education and Assistant Director of Students

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HARVEY LeROY WILSON, Ed.D.

Professor of Music and Chairman, Department of Music

Pennsylvania State Teachers College, West Chester, Pa., B.S.; University of Pennsylvania, Philadelphia, Pa., M.S., Ed.D.

FOSTER L. WYGANT, Ed.D.

Assistant Professor of Fine Arts

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FREDERIC HAROLD YOUNG, Ph.D.

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GEORGE J. ZEBIAN, Ph.D.

Assistant Professor of Latin

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LOUIS E. ZERBE, M.Mus.

Associate Professor of Music

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Part-Time Faculty Members in Special Fields

VICTORIA PAPALE FILAS, A.M.

Assistant Professor of Science

State Teachers College, Montclair, N. J., A.B., A.M.

GEZA GAZDAG

Assistant Professor of Health and Physical Education

National Military Academy, Budapest, Hungary, Diploma; Military Physical Education School, Budapest, Hungary, Diploma.

RUSSELL HAYTON, M. SAC. M.

Assistant Professor of Music

Chicago Conservatory, Chicago, Illinois, B.Mus.; Roosevelt College, Chicago, Illinois, B.Mus. in Ed.; Union Theological Seminary, New York, N. Y., M. SAC. M.

BRUCE KING, A.M.

Assistant Professor of Modern Dance

University of California, Berkeley, Calif., A.B.; New York University, New York, N. Y., A.M.

DOROTHY McLEMORE PRIESING, A.M.*Assistant Professor of Music*

Teachers College, Columbia University, New York, New York, B.S., A.M.

HARRIET H. ROSENSTEIN, A.B.*Assistant Professor of Science*

State Teachers College, Montclair, N. J., A.B.

HELENE S. ROSS, M.F.A.*Assistant Professor of Fine Arts*

Stella Elkins Tyler School of Fine Arts, Temple University, Melrose Park, Philadelphia, Pa., B.F.A., B.S. in Ed., M.F.A.

BARBARA ROSSMOORE, B.S.*Assistant Professor of Chemistry*

Ohio State University, Columbus, Ohio, B.S.

BETTY K. SOMMER*Assistant Professor of Health and Physical Education*

Hellerau-Laxenburg (Dalcroze) College for Modern Gymnastics, Eurhythmics and Modern Dance, Vienna, Austria, Certificate; Prague University, Prague, Czechoslovakia, Teaching Certificates.

Library Staff

ANNE BANKS CRIDLEBAUGH, A.M.	Librarian
ELSIE GIBSON, A.M.	Library Assistant, Acquisitions and Reference
SELMA S. HARRIS, A.B.	Librarian in Charge of Circulation
LILLIAN JONES, A.B.	Junior Library Assistant
EDITH G. H. LENEL, Ph.D.	Cataloguer
CLAIRE M. MERLEHAN, A.M.	Assistant Librarian, Reference
DOROTHY WALTER, M.S.	Librarian, Demonstration High School

Health Services

MURIEL BRADLEY, M.D.	College Physician
CHARLOTTE L. PRITCHARD, R.N., A.M.	College Nurse
MARY MORAN, R.N.	College Nurse

SECRETARIAL AND CLERICAL ASSISTANTS

Doris Asdal	Secretary, Film Library, Audio-Visual Aids
Catherine H. Atkinson	Secretary, Graduate Division and Office of Part-Time and Extension
Ethel Bakker	Secretary, Physical Education Department
Helen A. Barker	Mimeograph Room and Post Office
Susan Barto	Secretary to the Dean of Students
Robert R. Beckwith	Director, Men's Dormitory
Janice Blanton	Director, Women's Dormitory
Ellen Boal	Supervisor, Essex County Film Library
Elizabeth Briner	Secretary, Personnel Division
Bernice Bucci	Bookkeeper, Appropriations, Business Division
Maxine Bullard	Secretary, Graduate Division and Office of Part-Time and Extension
Nancy Burgum	Secretary, Registrar's Office
Lucille Cooke	Secretary, Personnel Division
Rita Edwards	Director, Women's Dormitory
Samuel Eells	Business Division
Natalie Fico	Secretary to the Superintendent of Buildings

Donald Forth	Food Service Manager
Nicholas Guarino	Bookkeeper, Revenues, Business Division
Annette Latterman	Secretary, Registrar's Office
Gaetena Manopoli	Secretary, Instructional Departments
Estelle Marsand	Secretary, Home Economics Department
Rose Metz	Secretary, Graduate Division and Office of Part-Time and Extension
Helen Meury	Switchboard Receptionist
Joan Micks	Secretary, Business Division
Margaret Mostica	Secretary, Bureau of Field Studies
Patricia Murtha	Secretary, Education Department
Lillian Newman	Secretary, Audio-Visual Aids
Barbara Osborn	Secretary, Registrar's Office
Elizabeth Pettegrove	Secretary, College High School
Alice I. Reaske, A.B.	Administrative Secretary
Marjorie Roehrenbeck	Secretary, Director of Admissions
Mary L. Russo	Typist, Library
Louise Salmond	Secretary, Faculty-Student Cooperative
Frances R. Smith	Secretary, Registrar's Office
Esther B. Spengeman, A.B.	Secretary, Education Department
Frances C. Steiner	Secretary, Registrar's Office
Henry Steiner	Assistant Business Manager
Catherine H. Stitt	Secretary to the Dean of the College
Arthur Thornton	Business Division
Frances Vinal, A.B.	Secretary, Staff Personnel
Jean Ward	Secretary, Director of Admissions
M. Arthurine Wibecan	Typist, President's Office

Faculty-Student Cooperative, Inc.

Harriet Quinlan, B.S.	Manager, College Book Store
A. Deane Nichols	Manager, Faculty Student Cooperative

Part I

GENERAL INFORMATION

PURPOSES

The purpose of the College is to serve the people of New Jersey by preparing youth for a constructive and useful life in society. The major responsibility of the College for the foreseeable future is to prepare teachers. These general aims are fundamental to the curriculum, course of study, and the method of teaching.

The more specific aims of the College are:

- (1) To prepare teachers for the secondary schools of the State.
- (2) To prepare those majoring in industrial arts, fine arts, music, home economics, physical education, and speech to teach in both the elementary and secondary schools.
- (3) To meet special needs of the school systems of the State, for example: Conducting surveys to determine speech patterns and difficulties of school children, sponsoring reading clinics for teachers and students, organizing workshops and institutes, and other services.
- (4) To offer graduate courses leading to the Master of Arts degree in those fields in which the College has qualified staff and adequate facilities. The Graduate Bulletin provides additional information.
- (5) To offer an on-campus summer session with courses for those wishing to matriculate for the A.M. degree and also for those who wish to continue their professional preparation, earn secondary school certification, and for those who wish to accelerate their graduation.
- (6) To offer field courses for teachers who wish to enlarge their scholastic background and increase their knowledge of education and thus improve their teaching and meet advanced certification requirements. Bulletins of the Part-Time and Extension Division explain these opportunities in detail.

Philosophy

Montclair's philosophy of education may be summed up in the word *service*, for it undertakes to educate teachers to *serve* society.

Montclair believes in and implements a four-fold program; general education, professional education, specialization education, and co-curricular activities.

One of the chief guarantees of good teaching is knowledge of subject matter. The greater the depth of a teacher's knowledge, the greater will be his effectiveness in the classroom. Because of the growing accumulation of man's knowledge in many areas of investigation and the increasing recognition of the interrelatedness of various fields, a teacher not only must know his own field in depth, but also must be aware of achievements in other major fields of study. Consequently Montclair provides a broad program of general education in addition to a concentrated one in specific subject fields. The broader a student's general education and the deeper his knowledge of his own field, the better will he be able to direct and advise students.

The curriculum of the College is designed to be sequential and integrated. From the broad base of general education in the first two years the student moves

toward more advanced work in his field of specialization and professional courses that prepare him for the task of teaching. Throughout the four years there is an integrating process growing out of systematic observation in the College High School and the demonstration of good teaching techniques in the College classes.

Knowledge of subject matter alone does not assure the best teaching, that is, the most effective means of sharing knowledge with others and causing others to learn. Therefore, a knowledge of methods and techniques in terms of adolescent growth and development is important to the high-school teacher. Since secondary education is concerned with all youth, Montclair believes that a comprehensive understanding of individual differences will enable the skilled teacher to adapt his broad and deep knowledge to individual needs.

Montclair believes, too, that classroom work in academic and professionalized subjects should be related to practical experience in observation and student teaching in the public schools.

Inasmuch as the co-curricular program of the secondary schools is an important part of the pupils' growth, Montclair provides its students with an opportunity to develop skills such as writing, speaking, and athletics. Similarly, the College encourages students to participate in social functions in order that they may acquire social poise needed by the teacher.

To assure the best results in all phases of the total program, Montclair has developed a counseling and guidance program which involves the faculty and administrative staff.

Further, Montclair believes that the work and program of the College should serve, not only students preparing to teach and those engaged in teaching, but also other individuals and communities in the State. Services to the latter, however, are rendered in accordance with the resources of the College and are consistent with the overall purpose of the College.

Accreditation

Montclair State College is a fully accredited member of the National Council for the Accreditation of Teacher Education, the Middle States Association of Colleges and Secondary Schools, and the American Association of University Women. Credits are exchangeable among colleges and universities which are members of the above regional and national associations.

History of Montclair State College

In 1903, the State Board of Education recommended that a Normal School be established in the northern part of the State of New Jersey. The following year the Legislature purchased a site of twenty-five acres in Upper Montclair. The main building, College Hall, was completed in 1908, and the first class was admitted in September of that year.

Seven years later, Edward Russ Hall, dormitory for women students, was built with the bequest of the Honorable Edward Russ, who, at the time of his death, was a member of the State Board of Education and chairman of the Normal School Committee.

In 1928 another women's dormitory, Chapin Hall, was added. The Demonstration High School building was completed in 1929. Additional land lying to the north of the main campus was purchased in 1927 and 1929, bringing the total area up to seventy acres.

On May 27, 1927, the State Board of Education passed resolutions as recommended by the State Department of Public Instruction, establishing the State Teachers College at Montclair for the education of teachers for the secondary schools. The first class was graduated from the four-year college curriculum in June, 1930.

Extension courses were added to the teachers college program in 1929. The summer session was established in 1930. Late in the spring of 1932, the State Board of Education voted that the College should offer graduate courses and grant a Master's degree.

In the November election of 1951, the voters of the State of New Jersey passed a fifteen-million-dollar bond issue to provide additional facilities in the six State Teachers Colleges and the State University. During the period, 1954-1957, four major buildings were constructed on the Montclair campus through the utilization of bond-issue funds. Stone Hall, dormitory for men, was completed in the fall of 1955. Finley Hall, providing facilities for the departments of Industrial Arts, Fine Arts, Home Economics, Mathematics, and Science, was completed in the fall of 1956. The combination building containing the Memorial Auditorium, Student Life facilities, and the cafeteria, as well as the Physical Education Building were opened in the early months of 1957.

In the spring of 1958, the State Board of Education approved the consolidation of Panzer College of Physical Education and Hygiene with the Montclair State Teachers College. In the same act, the Board established the Panzer School of Physical Education and Hygiene of the New Jersey State Teachers College at Montclair, with a major in this field.

As of July 1, 1958, the College's official name became Montclair State College.

In November, 1959, the voters of the State of New Jersey approved another bond issue to provide more facilities in the six State Colleges. In the near future additional buildings will be constructed on the Montclair campus as well as the enlargement and renovation of existing facilities.

Location

The College is located in Upper Montclair about three miles from Montclair Center. The campus extends into the communities of Little Falls and Clifton. The town of Montclair and the college campus are located on the east side of Watchung Mountain, which extends from north to south. From this elevation the campus commands a view of unusual interest and beauty. The city of New York, which is about twelve miles to the east, forms the background of the campus view. This view is impressive by night when one sees the myriad lights of this metropolitan section.

The College campus may be reached by the Lackawanna Railroad to Montclair, and then by bus to the southeast entrance; by the Erie Railroad to the Montclair Heights Station, which is near the south entrance; and also by direct bus lines from

New York (DeCamp 66), Newark (Public Service 60), the Oranges, (Public Service 76), and Paterson (Public Service 76). Major roads passing close to the campus are Routes 3 and 46 and the Garden State Parkway.

Grounds and Buildings

The College campus consists of seventy acres located on high ground overlooking the valley to the east. The campus is developed with lawns, roadways, parking areas, and athletic fields. An outdoor amphitheater has a seating capacity of 2,000.

The College now has the following facilities:

College Hall which contains the administrative offices, the Library, the Audio-Visual Center, and numerous classrooms and faculty offices.

Charles Finley Hall which houses the Fine Arts, Home Economics, Industrial Arts, Science, and Mathematics Departments.

The Student Life Building which contains a cafeteria, student offices, bookstore, recreation rooms, student lounges, the Alumni Lounge and Office, the Memorial Auditorium, and the Speech Department offices and classrooms. The Auditorium contains a pipe organ of 3,500 pipes.

The Physical Education Building which contains three large gymnasiums and other teaching areas and facilities for men and women.

The demonstration high school with small auditorium, gymnasium, library, home economics room, and classrooms.

Three dormitories, two for women and one for men, each of which houses approximately one hundred students—Each of these dormitories has a spacious lounge and additional recreational and social facilities, plus laundry facilities, storage rooms, and offices.

A recreation building with fireplaces and a kitchen provides a meeting place for clubs and other student groups.

An athletic field adjacent to the gymnasium includes a football field, baseball diamond, and running track.

In addition to the permanent buildings listed above, there are four temporary buildings containing classrooms and laboratories and faculty offices.

Expenses

General Expenses for Regular College Year of Approximately 37 Weeks

The annual tuition and fees for New Jersey residents are:

Tuition	\$150.00
Student Government Association Fee	36.00
General Service Charge	25.00
Student Teaching Fee	15.00

\$226.00

The registration fee for all students is \$2.00 per semester. Special fees in connection with senior graduation activities are determined by a senior committee each year prior to Commencement.

The tuition fee is payable in two installments, \$75.00 in September and \$75.00 in January. The student fees and service charges are also payable in two installments, one-half in September and one-half in January. These charges are subject to revision.

Living Expenses for Regular Year

The charge for board and room in dormitories is \$666.00 for the academic college year. This charge includes a room in the dormitory, and all meals when the College is in session. Quarterly payments are due and payable for the charge for board and room as follows:

\$166.50 on or before registration in September

\$166.50 on or before November 1

\$166.50 on or before registration in February

\$166.50 on or before April 1.

It is essential that these charges be met on the dates specified; otherwise, forfeiture of dormitory privilege may result.

After official notice of acceptance a student desiring consideration for dormitory housing should write to the Dean of Students for an application.

Students who are unable to be accommodated in dormitories are assisted in obtaining rooms in private homes near the College.

Refunds

Some students find it necessary to withdraw from College before the completion of their courses. Upon receipt of an official written notice of withdrawal, a portion of the tuition and Student Government fee paid by the student is refunded on a prorated basis. No refund is made after November 16 for the fall semester or after April 1 for the spring semester.

Scholarships and Loans

For complete information about scholarships and loans see page 41.

Faculty-Student Cooperative Association

The Faculty-Student Cooperative Association is a legally chartered non-profit corporation organized to operate the College Book Store, Snack Bar, vending machines, and other student services. The governing board is made up of student, faculty, and alumni representatives.

College Book Store

The store aims to supply such books and materials which are in demand by the student body and faculty. The store is located in the Student Life Building.

Food Service

Food at reasonable prices is served in the College cafeteria which is located in the Student Life Building. Sandwiches and light refreshments are available in the

Snack Bar throughout the day. Meal privileges are available on a regular basis to all students.

Gifts

The College has been fortunate in receiving many gifts which help to enrich student life on the campus. Alumni, faculty, students, and friends raised upwards of two hundred thousand dollars to help construct and equip the new Student Life Building. An excellent pipe organ in the Memorial Auditorium is the result of private subscriptions. Another fund in honor of Dr. Chapin, the first principal of the Normal School, provides loans to students in financial need.

Many other gifts have been presented by classes, graduates, and friends. These are now serving a variety of purposes on the campus.

Admissions

Admission requirements are arranged for three groups of students: those entering the freshman class; those entering with advanced undergraduate credits; and those entering the Graduate Division.

I. ADMISSION TO THE FRESHMAN CLASS

A. APPLICATIONS

All candidates for admission to the freshman class should file applications in the Office of Admissions before February 15th of the year in which entrance is desired. Admission forms are available from September 15th (one year prior to date of desired entrance) through February 15th. Applicants should submit all admission forms as soon after September 15th as possible.

All requests for application forms, and inquiries for information concerning admission as freshmen and as undergraduate transfer students should be addressed to:

Director of Admissions
MONTCLAIR STATE COLLEGE
Upper Montclair, New Jersey

Students who are undecided as to whether they should enter the teaching profession are cordially invited to make an appointment with the Director of Admissions to visit the College for personal interviews.

No application for entrance shall be considered unless it is accompanied by a \$5.00 non-refundable fee. After a student has been accepted by the College, a place shall be reserved for him only if he transmits a \$25.00 advance deposit to be applied against the student service fee when he enters the institution. The deposit cannot be refunded if the student later decides not to enter.

B. ENTRANCE EXAMINATIONS

Applicants for admission to the freshman class shall take either the State College Entrance Examination prepared under the direction of the Commissioner

of Education, or the Scholastic Aptitude Test of the College Entrance Examination Board. Application for the latter should be made directly to the College Entrance Examination Board, P.O. Box 592, Princeton, New Jersey, at least four weeks before the desired test date. Results of the test must be in the Office of Admissions before March 1st. All applicants who intend to use the College Board Examination for admission purposes are urged to take the December examination rather than a later examination. It is advisable to have the results of the *Junior College Boards* reported to the Office of Admissions. Further information regarding test dates will be supplied with application.

C. ACADEMIC REQUIREMENTS FOR ADMISSION

A certificate showing graduation from the twelfth grade of an approved secondary school or a certificate showing that the applicant is scheduled for graduation during the current scholastic year is required. The certificate shall name the secondary school subjects which the applicant has completed and in which he is enrolled, the number of weeks given to each subject, the number of recitation periods per week, and the scholastic standing of the applicant. The minimum units required for admission are as follows:

SUBJECT	UNITS
English	4
American History and Problems of Democracy.....	2
Mathematics	1
Science	1
* Foreign Language	2
Restricted Electives to be selected from the areas of Social Studies, Science, Mathematics, and Languages	2
Free Electives	3
Total	15

* Candidates for Business Education, Physical Education, Fine Arts, Home Economics, and Industrial Arts may substitute 2 units of work in these areas for the language requirement.

Upon recommendation of the high school principal, substitutions for the units listed above may be made for an applicant who is in the highest quarter of his graduating class. When a request for a substitution of this kind is made, it will be considered by a special committee consisting of the chairman of the major department concerned, the Dean of the College, and the Director of Admissions. If the above named committee recommends that a substitution be made, the recommendation will be referred to the President of the College for a final decision.

The above requirements are basic for admission to all specializations. However, students desiring to specialize in majors requiring a particularly broad and strong foundation must submit a minimum number of high-school units in these areas. The table below indicates the number of high-school units required at entrance for each specialization. As these requirements are minimal in nature, the table also indicates the number of high-school units recommended for admission to each specialization.

MAJOR	MINIMUM HIGH SCHOOL UNITS REQUIRED FOR ADMISSION	HIGH SCHOOL UNITS RECOMMENDED FOR ADMISSION
Business Education	0	2
English	4	4
Fine Arts	0	2
French, Latin, or Spanish	2	3 to 4
Home Economics	0	2
Industrial Arts	0	2
Mathematics	3	3½ to 4
Music	0	1 to 2
Physical Education	0	1
Science	2	3 to 4
Social Studies	2	2 to 4
Speech	0	1 to 2

D. SPECIAL REQUIREMENTS FOR ADMISSION

1. Age certification: A statement of date of birth. Applicants shall be at least fifteen years, nine months old before taking the entrance examinations.

2. Health report: The family physician, on a form supplied by the College, shall testify to the student's health and physical fitness. The College Physician may be asked for his recommendation regarding the candidate's ability to perform curricular and professional responsibilities.

Two years of regular *physical education* are required of ALL STUDENTS at Montclair State College. Any applicant having a physical disability which might jeopardize his admission because of inability to participate in two years of regular physical education, is urged to contact the College Medical Department for advice before filing admission forms. All individuals entering the teaching profession should be in excellent physical condition. It is doubtful that any individual who cannot participate in the normal physical-education program has the stamina to become a successful teacher. In the past, applicants have been rejected medically for such disabilities as heart trouble, high blood pressure, acute asthma, defective eyesight, obesity, and other conditions which may interfere with a teaching career.

The medical and physical examination form will be mailed only to those applicants who have been accepted by the College. This form shall be completed by a qualified physician following a thorough physical examination, and returned by the physician directly to the Office of Admissions within 14 days. The Admissions Office will refer this form to the College Physician who will either approve or reject the applicant.

3. Testimonials of Character: Two testimonials of good moral character from responsible persons not related to the applicant by blood or marriage are required on forms furnished by the College. One of these shall be a statement by an administrative or guidance official of the student's high school.

4. High School Rating: A rating of the student's character and probable fitness to succeed in teaching will be made by the officials of the applicant's secondary school on forms furnished by the College.

5. Interview: The College will interview each applicant who, on the basis of first-quarter eligibility or on the basis of an acceptable entrance examination, can be considered for admission. The interview will be conducted for the purpose

of obtaining an estimate of the applicant's probable success in college as a future teacher.

6. **Speech Test:** All applicants must satisfactorily pass a speech test since proper speech and diction are vital requirements for success in the teaching profession. The College is unwilling to accept a student who has any speech problem which cannot be corrected by reasonable effort on the part of the Department of Speech. Any individual who lisps, stammers, stutters, or has any other speech impediment or difficulty that might jeopardize admission to the College should contact the Chairman of the Department of Speech for advice regarding admission before filing entrance forms and paying the non-refundable application fee.

7. **Requirements for Special Areas:** In addition to the above requirements for admission, additional requirements are necessary for particular specializations. Before a student can be admitted to the physical education specialization, he is required to pass a standardized physical-education aptitude test. If his coordination or motor ability is found to be unsatisfactory, he will be denied admission to the physical-education program. However, such rejection will not jeopardize his consideration for other specializations in which he is qualified. Applicants desiring to major in music are required to pass successfully a standardized musical aptitude test, a piano audition, and an audition on the student's major instrument of interest, which may include voice. Speech majors are required to pass successfully a spoken audition with three members of the Speech Department. All applicants who desire to major in French or Spanish are required to pass both conversational and written tests before being admitted. Latin students are not required to pass the conversational test but are expected to pass a written examination.

E. FRESHMAN HONORS SECTIONS

Special honors sections are open to incoming freshmen who have demonstrated high scholastic ability. Candidates are required to take the College Board Entrance Examination. A selected group of freshmen will be invited to become candidates for this program. Eligibility will be determined on the basis of oral and written examinations administered by the College. Applicants interested in joining the program should write directly to the Chairman, Academic Honors and Graduation Committee, Montclair State College. Candidates who qualify for consideration will be notified by April 30.

I. ADMISSION AS AN UNDERGRADUATE TRANSFER STUDENT

The College is unable to admit all qualified transfer students who are legal residents of New Jersey because of a shortage of classroom space. In order to be eligible for admission by transfer, the applicant is required to have completed satisfactorily a minimum of 24 semester-hours of college-level credit from an accredited institution. Well-qualified applicants meeting the foregoing requirements will be considered in numbers consistent with the facilities of the College.

All requests for application forms and inquiries for information should be addressed to:

Director of Admissions
MONTCLAIR STATE COLLEGE
Upper Montclair, New Jersey

Applicants are required to have all transcripts, credentials, and records on file in the Office of Admissions by April 1st for September admission, and by December 15th for late January admission. Definite notice of acceptance cannot be mailed until a few weeks before the beginning of any given semester.

III. ADMISSION TO THE GRADUATE DIVISION

Application blanks for admission to graduate work may be secured from the Chairman of the Graduate Council.

Official transcripts of all previous college work and a five dollar (\$5.00) application for matriculation fee must accompany the written application. No action is taken until such transcripts are received.

Upon receipt of the application blank and the transcripts of previous work, the student is asked to have personal conferences with the department adviser of the department in which he wishes to major, and with the Chairman of the Graduate Council. These conferences are a prerequisite to the action of the committee on admission. The student is notified in writing as to whether or not he has been accepted.

While the applicant for matriculation for the Master's degree must be a graduate of an accredited college or university, and should have a high undergraduate scholastic average, senior students currently enrolled in the College who have good academic records and are within sixteen semester-hours of graduation may be permitted to take up to eight semester-hours of graduate work concurrently with the balance of their A.B. degree requirements and prior to graduation in courses of a senior-graduate level, i.e., courses between 400-499 appearing in the most recent Graduate Bulletin. However, such students must have written permission signed by the Department Chairman concerned, the Dean of the College, and the Chairman of the Graduate Council. The special application blank for this purpose must be applied for in the office of the Registrar.

For more complete information see the current Graduate Bulletin, pages 11-20, with particular reference to senior undergraduates on page 14.

Placement Service

Since the Department of Education is responsible for the administration of the student-teaching program, its close contact with the various public schools of the State makes it the logical department to direct the work of placement of graduates. The Placement Bureau serves two purposes: helping the graduates of the College to secure positions suitable to their training and abilities; and, by so doing cooperating with school authorities who are seeking to fill teaching and administrative positions. Because of its relationship with the Department of Education the Bureau is able to provide definite and reliable information relative to the training, experience, and personal fitness of candidates. It arranges for personal interviews and for observation of candidates in teaching situations.

Credentials for every graduate of the College are compiled from class records reports on student-teaching, and from information secured by consultation with department chairmen, the Registrar, faculty advisers, supervisors of student-teach

ing, members of the personnel division, and others who may be informed as to special aptitudes and activities.

In order to fulfill its obligations to both employers and prospective teachers, the Bureau requests complete information about vacancies to be filled. It assumes important responsibilities to the teacher, to the individual school, and to public education as a whole.

The Alumni Association

All graduates of Montclair are members of the Alumni Association and are active members if they make an annual gift. Association officers, the executive board, and the resident executive secretary plan a schedule of events to which all graduates and their guests are invited. *Alumni Life* is mailed to each graduate several times a year, giving news of activities of the College, the faculty, and the alumni.

The Alumni Association strives to continue friendships and contacts among its members and with the College.

The alumni maintain an office in the Student Life Building and through their program of annual giving support the many activities of the College and of the College Development Fund.

NUMBER OF GRADUATES

Normal School Diplomas—3,921

August, 1959

A. B. Degrees—6,122

A. M. Degrees—2,060

THE MONTCLAIR STATE COLLEGE DEVELOPMENT FUND

The Montclair State College Development Fund has been established by friends of the College to provide additional financial aid upon which an even better institution can be built.

The Montclair Development Fund is not used to meet any obligations which the State of New Jersey should and will assume. A Board of Trustees consisting of faculty, alumni, and friends of the College make it possible to accomplish ends that would not be accomplished in the future from State appropriations.

An example of this is the Student Life Building which now serves as the focal point of the College. This building could not have been constructed in the foreseeable future with state funds.

Committees of parents, alumni, and friends have been working to raise funds for faculty improvement grants and for improvement of the cultural activities of the College.

ADMINISTRATIVE ORGANIZATION

The College is organized for administrative purposes into three divisions: instructional administration, personnel administration and business administration. These divisions are under the direction of the President of the College and the Administrative Council in cooperation with the faculty.

Instructional Division

The Dean of the College has direct supervision over the instructional division of the College. The Dean is assisted by department chairmen, the Registrar, librarians, and committees in considering matters related to instruction. This division is concerned with curriculums, instructional facilities, teaching aids, assignment of staff and class rooms, and all matters related to the instructional program of the College.

Personnel Division

The personnel division has the responsibility of providing for the physical health, mental health, and social life of all students. The Dean of Students is the head of the personnel division. He is assisted in his responsibilities by assistant directors of personnel for men and women, the college physician, college nurses, dormitory directors, psychiatric consultant, and faculty members who have specific assignments as advisers to student groups or individual students.

Business Division

The business division has charge of financial matters such as appropriations, receipts, expenditures, inventories, audits, and reports. This division also superintends buildings and grounds, and food-service operations.

Tuition and fees are paid at the Business Office.

LIBRARY

Located on the main floor of College Hall is the library of approximately 90,000 volumes with a large reading and reference room and three smaller reading rooms housing the music collections, the curriculum laboratory, the textbook library, and the art and physical education libraries. The integration of the Panzer College of Physical Education, Health, and Recreation with Montclair State College added over 9,000 books to the college library. Special collections include the Howe collection of organ music; the Mark Andrews music library; the Webster Memorial collection of modern poetry, including some first editions and autographed copies; the Finley collection of science textbooks, which has been augmented by early textbooks of historical significance from other sources; and the Carnegie Secondary Art set of books and pictures. Of special interest is the China Institute Library of more than 400 titles, a permanent loan from the China Institute of New Jersey. The library also maintains a complete file of bulletins of the U.S. Office of Education for which the library is designated as an official depository library in the area. An up-to-date and widely-used file of pamphlets, maps, and pictures, classified by subject, is available to all students.

An annex to the Library on the same floor as the main Library is being used as a special reading room.

In keeping with the policy of the College as a whole, the field of education is especially complete, and at the same time the subject-matter fields are well covered on both the graduate and the undergraduate level with a well-rounded collec

tion. Reading for fun and enjoyment is stimulated by the constantly changing group of "Recent Books" conveniently located in the library foyer.

All of the books, including the reference collection, are on open shelves to which the students, as well as faculty, graduates, and teachers-in-service, have access and borrowing privileges. This open-shelf policy applies even to the periodical collection which consists of back issues of all but the most ephemeral of periodicals received. Bound volumes of magazines total over 3,000. These are all housed in the Library Annex.

Supplementing the College Library is the library of the College High School which houses over 4,600 volumes and is located in the College High School. These books are available through the main catalog as well as through the catalog of the College High School. The High School Librarian works in close cooperation with the members of the College Library staff, particularly in the field of literature for adolescents, in which an extensive and up-to-date collection is maintained.

BUREAU OF FIELD STUDIES

The Bureau of Field Studies offers educational travel courses. They are described in various sections of this bulletin, and more details are given in bulletins published by the Bureau of Field Studies. SOCIAL STUDIES 302, *Field Studies in Urban Life*, is required of all social studies majors in the junior year. The other field studies courses are elective.

NEW JERSEY STATE SCHOOL OF CONSERVATION

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Courses offered include field studies in biological and physical sciences, conservation of forests and wild life, conservation of soils and water, arts and crafts, field science for elementary-school teachers, water safety and first aid, camping education, rural sociology, and related subjects.

Descriptions of course offerings at the New Jersey State School of Conservation are contained in special announcements which may be obtained by writing to the director of the New Jersey State School of Conservation, Branchville, New Jersey.

THE GRADUATE DIVISION

Graduate courses were first offered at Montclair State College in the summer term of 1932 and have been offered in all regular and summer sessions since. In order that the work may be available to teachers and administrators in service, the courses are scheduled during the academic year in the late afternoons, evenings, and on Saturdays. The courses are given by the members of the college staff and are granted residence credit; thus, it is possible for teachers-in-service to earn a Master's degree without taking a leave of absence from their teaching positions. That the College is advantageously located for such work is shown by the fact that

the majority of the high-school teachers of the State are within a radius of twenty-five miles of the campus.

The work is organized to care for two groups of graduate students; those who are teaching and wish to take courses in the late afternoons, evenings, and on Saturday mornings, and those who wish to do full-time residence work. It is also organized for two types of students as regards previous preparation; graduates of liberal arts colleges, and graduates of teacher-training colleges. Most of the education courses required for teacher certification in the State of New Jersey must be taken on the undergraduate level. A few courses may be taken on the graduate level. The number of credits so earned which may be applied on the A.M. degree, of necessity, varies according to the graduate requirements in the various major areas of specialization. Inasmuch as no graduate credit is given for supervised student-teaching, graduate students from liberal arts colleges, as a rule, spend a college year and a summer term or an additional semester to meet State requirements for certification and the conferment of the Master's degree. The time required depends upon the character and amount of undergraduate credits.

Majors in graduate work are offered in the fields of Administration and Supervision, Business Education, English, Industrial Arts, Mathematics, Personnel and Guidance, Science, Speech, and Social Studies. In each curriculum there is a core of educational courses, major subject-matter courses, and electives. The amount of each type of work depends on the candidate's undergraduate work and is determined by the Graduate Council. The curricula in Administration and Supervision and in Personnel and Guidance are limited largely to specialized professional courses in order to meet State certification requirements.

For admission requirements, see page 30.

Students interested in this work are advised to write to the Chairman of the Graduate Council for a bulletin and full information.

OFFERINGS FOR TEACHERS-IN-SERVICE

The College now offers senior-graduate, graduate, and teacher certification courses on campus during the late afternoon, evening, and Saturday morning, and off-campus in various centers, for the convenience of those desiring professional growth through these means.

Part-Time and Extension Courses

Part-time courses, carrying residence credit for students unable to attend the College during the regular full-time daily program-hours, are offered on the campus during the late afternoons, early evenings, and Saturday mornings.

Courses of the Extension Division are offered off-campus in any community in New Jersey in which the teachers-in-service desire the Montclair State College to offer a particular course and if that course appears in either the Undergraduate Catalog or the Graduate Bulletin of the College. It is necessary that twenty or more students enroll in such an Extension Course.

Bulletins are published for the information of those who wish to attend part-time or extension courses. Courses which meet for one two-hour session a week

for sixteen weeks receive two semester-hours' credit. Credits gained in part-time and extension courses are accepted with certain limitations towards a degree or a secondary teacher's certificate. Under certain circumstances Montclair State College undergraduates may schedule courses offered in the late afternoon or evening. A form describing the procedure for doing this is available at the Registrar's Office. Only those students should register who are willing to meet the full requirements and take all examinations. Permission may be granted in special cases for students to take work for no credit. Other information, including bulletins, may be obtained from the Director of Field Services, Montclair State College, Upper Montclair, New Jersey.

Summer Session

Those who are eligible for admission to the summer session are: (1) elementary, junior, and senior high school teachers; (2) undergraduate and graduate students of liberal arts colleges seeking secondary certificates; (3) graduate students seeking the Master's degree; (4) experienced teachers seeking administrator's and supervisor's certificates; (5) graduates of the two and three-year normal school courses who are working for a Bachelor of Arts degree; (6) normal school, teachers college, and liberal arts college students, who have been permitted to meet certain requirements through summer session courses; (7) laymen who may wish to take certain courses because of their cultural interest; and (8) high school graduates.

The summer session is attended by approximately one thousand students, representing about seventy-five teachers colleges, liberal arts colleges, and universities located in many states. Montclair State College undergraduates planning summer session work at this College or at another college or university should fill out the form, "*Application for Permission to take Summer Work*", and should secure the required signatures. This should be done well in advance of the summer session registration date. Forms are available in the Registrar's Office.

The summer session begins during the last week of June or the first week of July and extends over a period of six weeks. For other information, including bulletins of the summer session, address the Director of the Summer Session, Montclair State College, Upper Montclair, New Jersey.

Part II

STUDENT PERSONNEL AND ACTIVITIES

STUDENT INTERESTS AND ACTIVITIES

General Citizenship

To teach is a privilege and not a right of every individual. The College is organized for students who have a sincere interest in promoting the welfare of society through the medium of the public schools. Students should take advantage of the opportunities offered by the College for developing their educational interests, their physical health, their emotional adjustment, and their social attitudes and habits. Each student is expected to make definite contributions to the welfare of his associates and to the life of the College. Students are encouraged to demonstrate initiative and leadership through cooperation and service during their life at Montclair. These are important attributes for one who is training to be a teacher.

Student Government Association

The Student Government Association is composed of all undergraduate students. Its governing body is the Board of Trustees which includes a president, vice-president, treasurer, assistant treasurer, recording secretary, and corresponding secretary who are elected by the entire student body; the president and two representatives of the Senior, Junior, and Sophomore Classes, and the president and one representative of the Freshman Class who are elected by their respective classes; the Dean of the College, and one financial adviser appointed by the Administration, the Dean of Students, and the Assistant Directors of Students, who are non-voting advisory members.

The responsibilities of the Board include the handling of all student finances, the chartering and cancelling of all clubs, improvement of social and physical welfare, extra-curricular activities, and the general conduct of the student body.

A complete list of the committees appointed and the clubs chartered by the Board of Trustees is found in *The Arrowhead*, the student handbook.

Orientation of New Students

The Director of Admissions is responsible for the orientation of all freshmen and transfer students. During orientation the freshmen have an opportunity to become acquainted with the officials of the College, and the Student Government Association. Information is provided regarding the functions and operations of the Student Government Association and the various campus groups and organizations. Guided tours are arranged by the Citizenship Committee to facilitate recognition of campus buildings and the location of the various offices of special importance to freshmen. The College attempts to impart to the student a feeling for its history, traditions, ideals, and objectives.

The library staff presents basic instruction in the use of library facilities. Provision is also made for meeting other requirements such as medical examinations, photographs for official records, aptitude and placement tests, and conferences and registration.

The highlight of the many social events designed to welcome new freshmen and to make them feel at home is the President's Reception. This reception provides an opportunity for the new student to meet personally the President and other members of the administrative staff. The Big Brother-Big Sister Dance and the Peace Dance are other traditional social events.

Music and Art

Cultural background courses in music and art are required of all students. In addition, music electives and the music organizations of the College provide opportunities for further study in fields of special interests. The music organizations of the College include: the A Cappella Choir, the Orchestra, the Band, the Opera Workshop and the Music Workshop, including various types of vocal and instrumental ensembles. Concerts are given throughout the school year by guest artists, music faculty, and advanced music students.

Because of the proximity of New York City, the College is able to offer unusually fine opportunities in music. Field trips are frequently made to the Metropolitan Opera, the New York Philharmonic Orchestra, and Town Hall concerts. Additional opportunities for attendance at cultural affairs are afforded by the use of the Memorial Auditorium by various community and state organizations.

The art electives give all students an opportunity to work creatively with various art media. The Fine Arts Department facilities include fully equipped laboratories for sculpture, painting, textiles, print making, ceramics and theater. Field trips are taken to art museums in New York City and the metropolitan area.

Drama and Theater Productions

The college recognizes the value of drama and theater in the cultural life of a well-rounded student. In the classroom, dramatic literature is studied in historical perspective as an art form and as a mirror of social institutions. Field trips are arranged to both professional and amateur productions with attendance required in connection with some particular courses in theater. Elective offerings in conjunction with the speech major cover all aspects of dramatic production and are open to the entire student body. The Memorial Auditorium serves as a laboratory for college theatrical activities. At least two major productions each year are sponsored by Players, the undergraduate college-wide dramatic organization. The program of this organization also includes work-shop activities throughout the year and assistance to other producing groups on campus. Several courses require students to direct workshop productions. These may be done arena-style or in the small theater located in the College High School on the campus.

Assembly Programs

During the year a series of assembly programs is offered for the cultural benefit of the students and faculty. These programs include presentations by outside

artists and speakers, student government members and officers and student recitals and dramatizations. Since assembly programs are an important part of the college offering, students are required to attend regularly. A Student-Faculty Committee plans the assembly programs.

Student Exchange with French and Spanish-Speaking Countries

The College has a student exchange program in the field of modern foreign languages. Selected students following their junior year may be offered the opportunity to study abroad for a year in some foreign teachers college or university under Montclair auspices. Students go to France, Canada, Spain, Mexico, or South America. This program is administered through the Margaret B. Holz Fund for Student Exchange.

College Athletics

The college maintains an intercollegiate and intramural sports program for men and women. The principal sports for men include football, basketball, baseball, track and field, golf, tennis, soccer, wrestling, bowling, fencing, and gymnastics.

The women's athletic activities include volley ball, basketball, softball, tennis, golf, archery, fencing, bowling, field hockey, and gymnastics.

Varsity sports are administered by the Montclair Athletic Commission which is composed of students and faculty members. For a complete description of the College's athletic program, activities, and facilities, see the Panzer School of Education and Hygiene, page 154.

Student Publications

The Arrowhead supplies instructions, Student Government Association rules, descriptions of organizations, songs, cheers, and other matter of special value to new students.

The Montclarion, a weekly newspaper, covers a variety of subjects of special interest to students.

The Montclair Quarterly is the student literary magazine, which publishes original contributions in art and literature.

La Campana, the college annual, is published by the Senior Class.

Dormitory Life

The regulations governing dormitory life and the opportunities for social affairs, entertainments, and athletics are determined and promoted by the College President, the Dean of Students, the Assistant Directors of Personnel, the dormitory directors, the Honor Board of the Women's Inter-Dormitory Association, and the Council of the Men's Dormitory.

The College has three dormitories: Chapin and Russ Halls housing two hundred women and Stone Hall housing one hundred men. Increasing college enrollment has resulted in waiting lists for dormitory rooms each year. After official notice of acceptance students desiring consideration for dormitory housing should

write the Dean of Students for a dormitory application. New dormitories for men and women are to be built in the near future.

The distance one lives from the campus is an important consideration for selection for dormitory occupancy. Those students not living within commuting distance who cannot be accommodated in a dormitory are assisted in obtaining rooms in private homes near the campus.

Social Activities

A program of social and recreational activities is offered by the College. All College dances are sponsored by the Student Government Association; class and club dances, social affairs, banquets, and shows are sponsored and run by their respective organizations. The dormitory Thanksgiving, Christmas, and Easter dinners, the All-College Carnival, and many other affairs have become traditional in the life of the College.

Honor Societies, Fraternities, Sororities, and Clubs

A complete list and description of all honor societies, fraternities, sororities and clubs is found in *The Arrowhead*, the student handbook.

Who's Who in American Universities and Colleges

Each year a number of outstanding seniors are chosen for inclusion in this national listing. The selection is based on scholarship, participation in co-curricular activities, and character qualifications.

STUDENT PERSONNEL SERVICES

Student Personnel Division

The Student Personnel Division headed by the Dean of Students, includes Assistant Directors of Student Personnel, the Director of Admissions, the Registrar, the College Physician, College Nurses, and resident dormitory directors.

The major responsibilities of the Student Personnel Division are: student counseling and advisement, veterans counseling, recruitment, admissions, registration, part-time placement, academic records and reports, health services, public relations, weekly calendar of events held on campus, co-curricular activities, scholarships, loans, housing, and parking.

Student Counseling and Advisement

All members of the Student Personnel Division provide guidance and counseling services for students.

In addition, faculty advisers are assigned to all entering students. These advisers remain with the students for four years and assist them in curriculum planning and counsel them regarding their scholastic progress or deficiency.

Attendance and Absences

All students must attend scheduled classes regularly. All absences for personal reasons, including illness of less than two days, death in the family, serious

illness of parents, or other types of personal reasons for absences, are within the jurisdiction of the faculty member to arrange for excuses with the students. Official excuses are issued by the Medical Department for absences of two or more days because of illness. Official excuses are issued by the Dean of the College for participation in College-sponsored field trips, athletic trips, or other College-sponsored assignments only. In cases of excused absences, students are responsible for making up missed assignments. In cases of unexcused absences, individual faculty members determine whether or not any make-up work may be accepted.

Veterans Counseling

Any veteran who plans to attend Montclair State College should apply for a certificate of eligibility and entitlement at the nearest regional office of the Veterans Administration well in advance of registering at the College. In requesting this certificate, the veteran is advised to indicate clearly his educational objective. The Veterans Administration has established certain limitations especially with regard to change of curriculum or educational objective. A veteran enrolling for the first time at this College should consult with the Dean of Students to make certain that his certificate is in order and that he has taken the proper steps to expedite his education under the provisions, Public Laws 550 and 894.

Health Services

The College employs a full-time physician and three full-time nurses. The Medical Department, including the College Infirmary, is located in Edward Russ Hall and is under the supervision of the College Physician. The facilities and services of the Medical Department are available to commuters and dormitory students. The College Infirmary is staffed twenty-four hours a day. Students, at time of entrance, must be examined by the College Physician to determine whether they are free from any disease or infirmity which would unfit them for teaching. An examination by the College Physician may be required of any student at any time to determine whether his physical condition warrants his continuance in the College. The College also requires all students at time of entrance and during their freshman and senior years to submit evidence of freedom from tuberculosis. All students who are positive reactors to a tuberculin test will be required to furnish an X-ray.

All seniors must have a physical examination prior to beginning their student-teaching assignment. The results of this examination may be used to fulfill State requirements for certification if this examination is made one year prior to graduation. The student may use his personal physician or be examined by the College Physician.

The College provides the services of a psychologist on a part-time basis. Appointments for this service are scheduled by the Dean of Students.

Student Insurance

A voluntary Student's Medical Reimbursement Insurance Plan covering accident and sickness benefits is available for all students. The premium for the college year is \$11.50 and is payable in full in September. Students are encouraged to

purchase this insurance. In the event of disability the student should get instructions for filing the claim at the College Infirmary.

Parking

All students who are eligible to drive automobiles on the campus are required to register their automobiles and display a current decal according to instructions which are issued by the Office of the Dean of Students. Students must sign an agreement to observe all traffic and parking regulations. Failure to observe these regulations will result in the loss of parking privileges.

Because of limited parking facilities, dormitory students and students living within two miles of the campus are not permitted to park their automobiles on campus or on the streets in the vicinity of the College. Freshman students will be required to park their cars in specially designated areas. Commuting students are encouraged to organize car pools and to use public transportation in order to conserve parking space.

SCHOLARSHIPS AND LOANS

All scholarships and loans are coordinated by the College Scholarship Committee. Each application for aid is reviewed by the committee and some financial assistance may be granted to students who can meet the scholarship standards and demonstrate financial need. Students must maintain a satisfactory scholastic average in order to retain their scholarships and receive additional loan payments. All applications except for State Scholarships should be made to the Dean of Students. The major scholarships and loan funds are as follows.

State Scholarships

Chapter 150 of the New Jersey Laws of 1959 provide for competitive college scholarships to be awarded to a maximum of five percent of each year's high-school graduating class. Recipients of the scholarships will be selected on the basis of *demonstrated financial need; high moral character; good citizenship and dedication to American ideals; and achievement on a competitive examination.*

Each State Scholarship Award pays the full State College tuition fee and is in effect for a period of four years, provided the recipient achieves satisfactory academic progress and continues in full-time enrollment in a college curriculum leading to or accreditable toward an undergraduate degree.

Applications may be obtained at any high-school guidance office or by writing to: The New Jersey Scholarship Commission, State Department of Education, 175 West State Street, Trenton 25, N.J.

Work Scholarships

Students requiring financial assistance are assigned to work in the cafeteria, library, laboratories, and offices. These work scholarships are available to 25% of the College enrollment. The equivalent of such work is credited toward the payment in part or in whole of any one or combination of charges for tuition, room, or board. Applications are available from the Dean of Students after a student has been admitted to the College.

National Defense Student Loan Program

The College participates in the Federal Loan Program which is described in the National Defense Education Act, Title II, Student Loans. Students are eligible to participate in this loan program provided there is evidence of need and satisfactory scholarship is demonstrated. Recipients of these loans are not required to begin making payments until one year following graduation from college. An amount equal to 10% of the loan is forgiven for each year of public school teaching in which the applicant engages. A total forgiveness of 50% of the original amount borrowed, representing five years of teaching, is possible under the provisions of the law.

The College does not take applications for Federal loans until the prospective student has received an official letter of acceptance to the College. Additional information and application forms are available from the Dean of Students.

New Jersey Bell Telephone Company Scholarships

Two \$300 scholarships are awarded annually to two students from the Junior or Senior Class. These scholarships are awarded to a New Jersey resident on the basis of financial need, scholarship, and demonstrated ability for teaching while at college.

Radio Corporation of America Scholarships

One scholarship of \$800 is awarded annually to a junior or senior student who is being trained as a teacher in the field of science or mathematics. This scholarship is awarded on the basis of academic ability, character, financial need, and a career plan pointed toward teaching.

One scholarship of \$250 is awarded to a competent high-school senior who is interested in teaching science or mathematics.

Edward Russ Scholarship Fund

This fund was established from the residue of the estate of the late Edward Russ. Proceeds are used to assist deserving students who offer assurance that they will make valuable contributions to the profession of teaching.

Chapin Memorial Fund

This loan fund was established by the Alumni Association in honor of the late Dr. Charles Sumner Chapin, Principal of Montclair State Normal School. Loans are made principally to upper-class students on the basis of the candidate's personal and scholastic fitness for the profession of teaching and financial need.

John C. Stone Scholarship

This fund was established by the friends of the late Professor John C. Stone in memory of his contribution to education. The proceeds are used as a scholarship for junior and senior students who are mathematics majors.

Margaret B. Holz Fund for Student Exchange

The exchange student movement at Montclair was conceived and developed by the late Professor Margaret B. Holz, and it was in her memory that a fund was created. The proceeds of the fund provide financial assistance to those upperclassmen of the Modern Foreign Language Department who desire to study abroad.

Mark Andrews Scholarship Fund

This scholarship is established in the name of the Montclair Glee Club in memory of Mark Andrews. This award is made to an upperclass student who is interested primarily in the teaching of choral music and who needs financial assistance.

Field Studies Fund

This fund was established by Dr. Harold S. Sloan, a former professor at the College. The interest on an investment of \$10,000 is used for the development of the work of the Bureau of Field Studies and for scholarships for defraying expenses of field-study courses.

Clarence O. S. Howe Memorial Organ Fund

The fund provides organ scholarships each year for upperclassmen from the income derived from this memorial to a friend of the College.

Part-Time Employment Service

The Personnel Office lists opportunities for part-time employment. Students interested in part-time employment should register in the office of the Dean of Students.

Employers are invited to list part-time job openings with the Dean of Students.

Part III

THE COLLEGE CURRICULA

The content, organization, and instructional procedures of the various curricula and courses are based on the guiding principles of the report of the State-Wide Curriculum Commission adopted by the State Board of Education in 1956. These principles are in general accord with those which Montclair has followed in developing its curricula in the past. They have directed and unified the work of the staff in its selection, organization, and treatment of curricular materials.

These guiding principles are:

- (1) The definite objective of a professional college makes certain requirements necessary, yet insofar as practicable the special interests of individual students should be recognized.
- (2) After the major and minor fields of specialization have been chosen, there should be comparatively little opportunity for free elections.
- (3) Each curriculum should provide a basis of required background courses and professional activities.
- (4) Each curriculum should provide for an understanding of the aims and organization of education in the appropriate levels and for guidance and skill in selecting, organizing, and presenting instructional materials.
- (5) Each curriculum should make adequate provision for specialization.
- (6) Subject matter should be treated professionally.
- (7) The courses and activities in a given curriculum should be sequential and integrated.
- (8) Courses should be broadly humanizing and should be related to what takes place in society and what is done in school.
- (9) The demonstration school should be the laboratory and integrating center of all courses and all curricula.
- (10) General educational theories and techniques should be exemplified in regular class instruction and frequently demonstrated in the laboratory school.
- (11) The relative value of the elements of the professional instruction should be checked by the strengths and weaknesses of the college product.
- (12) The curricula and courses of the College are the servants of a changing society, and therefore should be subject to continual adjustment.

A professional school has, by its very nature, definite aims and objectives, and, therefore, practical reasons for preparing and requiring certain fundamental types of work. Such requirements are characteristic of professional schools generally. It is, however, the purpose of the College to recognize the interests and aptitudes of individual students and to be guided by these, provided that they do not lead to haphazard and unsystematic selections and procedures.

FIELDS OF INSTRUCTION

The general instructional division of the College has three well-established functions. The first is to provide each student with a rich background. The second is to provide professional subject matter which includes sound standards of schol-

arship. The third is to provide professional theories and techniques and their application in student teaching. Each of these three departments of the instructional division is discussed briefly in the following paragraphs.

Professional-Cultural Background (General Education)

Basic general education is "that phase of education which prepares the individual for purposeful and responsible living and citizenship in a free society as distinguished from that which prepares him for a profession or occupation." Such courses as communications, the humanities, science, mathematics, social studies, and mental-physical growth and health are included.

Every teacher who is to recognize and use the many-sided interests of a school pupil must have a broad philosophy of life and a human interest in the life experiences of youth in present-day society. Furthermore, every teacher who is to specialize in a field of knowledge which is somewhat narrow should be familiar with the interests, activities, and problems of present-day society as they are related to the subject matter of his field of specialization. In order to meet these professional needs the College requires that every student, regardless of major field of specialization, do two things. First, he must become familiar with the social, political, economic, industrial, scientific, religious, literary, and aesthetic phases of life. Second this background of culture should be a body of related and well-assimilated knowledge rather than a collection of isolated parts. In other words, the interdependence of each of the phases of life mentioned above should be recognized and made meaningful.

The professional-cultural background courses comprise more than one-third of the total college requirements for graduation.

Professional Subject Matter (Specialization)

Professional subject matter refers particularly to courses in the student's major field of specialization. It is thought of as departmental specialization built upon the related and fundamental body of knowledge which has been called professional background, or general education.

Every teacher should have thorough command of the subject matter in his special fields of instruction. This subject matter does not include merely the bare requirements for the prescribed work in schools. It does include such scholarship as will stimulate a true intellectual curiosity and provide for rich margins of knowledge.

Each student is required to complete a minimum of thirty semester-hours in his major field of interest in addition to the units required of all students. It has been the policy of the College to recognize that its professional duty is to treat its subject matter professionally, that is, to provide not only for an academic knowledge of subject matter but also a teaching knowledge of that same subject matter. A teaching knowledge requires an understanding of the way in which subject matter is to be organized for teaching purposes and how it may be presented to the best advantage under varying conditions to students.

Professional Education—Basic and Specialized

Basic professional education is that phase of education directly related to the knowledge, skills, and attitudes necessary for effective teaching. Included are those courses which enable a student to understand the needs, interests, and capacities of all who may someday be under his instruction. These courses are offered in the Department of Education, with the exception of the specialized subject-matter methods courses which are offered by the respective major departments.

The prospective teacher should have not only an adequate cultural background and a thorough teaching knowledge of subject matter in his special fields, but also a teaching knowledge of adolescent pupils and an understanding both of the processes involved in their instruction and of the part played by education in contemporary society.

The fact that the techniques used in the professional treatment of subject matter cannot be divorced from the subject matter itself makes it apparent that there must be a close relationship between the subject matter departments and the department responsible for training in the theories and methods of education.

The Department of Education offers courses in the psychology and philosophy of secondary education, in various techniques and methods of teaching, and in the principles of administration of both elementary and secondary schools.

Curricula for home economics, fine arts, industrial arts, music, and physical education lead to certification to teach in elementary and secondary schools. Professional education for these curricula include organization, principles and techniques, observation and experience on the elementary school level in addition to similar provisions on the secondary school level.

Observation of individuals, groups of students, and classes in the College High School is required of students during the four years of their college course, beginning with orientation to the College High School in the freshman year, and ending with an intensive program of observations in the student's major subject, closely coordinated with the course in methods of teaching his major subject during the senior year.

Ten weeks of student teaching in a public school are required of each student. This experience is planned and arranged by the Department of Education and supervised by members of the department and of the student's department of major interest.

Summary of Course Requirements for the Bachelor of Arts Degree

	Semester-hours
I Professional Background Courses (General Education)	
English 100C <i>Fundamentals of Writing</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3
Social Studies 100A <i>Development of World Civilization, I</i>	3
Social Studies 100B <i>Development of World Civilization, II</i>	3
Social Studies 200A <i>Contemporary American Life, I</i>	3
Social Studies 200B <i>Contemporary American Life, II</i>	3
Science 100A <i>Physical Science</i> or	4
Science 100B <i>Biological Science</i>	
Science 100C <i>The Earth Sciences</i>	2
Mathematics 300 <i>Social Uses of Mathematics</i>	2
Mathematics 400 <i>Educational Statistics</i>	2

	Semester-hours	
Elective in Mathematics or Science	2	
English 100G <i>Western World Literature</i>	3	
Fine Arts 100 <i>Introduction to the Visual Arts</i>	3	
Music 100 <i>Music Appreciation</i>	2	
Language 300 <i>Foundations of Language</i>	2	
Elective in the field of humanities	2	
Physical Education 100A, 100B, 200A, 200B <i>Physical Education Activities</i>	2	
Education 100 <i>Mental Hygiene and Personal Adjustment</i>	2	
Health Education 100 <i>Healthful Living</i>	2	48
II <i>Professional Education (Basic)</i>		
Education 201 <i>Human Development and Behavior, I</i>	3	
Education 202 <i>Human Development and Behavior, II</i>	3	
Education 303 <i>The Teacher in the School and Community</i>	3	
Education 401 <i>Development of Educational Thought</i>	3	
Elective in Professional Education	3	15
III <i>Specialization (Major subject including student teaching)</i>		
See departmental requirements		53
IV Electives		12
		<hr/> 128

THE LABORATORY SCHOOL

The College High School

The College High School is an integral part of the College's program of teacher education and educational research. Located in a building equipped for the regular classes and activities of a six-year high school, it serves the College faculty as a continuously available testing ground for theory and procedure. Here, also, prospective teachers have opportunities for systematic observations of classroom problems and for the detailed study of the individual adolescent.

A special feature of the laboratory school is its intimate coordination with the College curriculum. In many instances, College methods classes are conducted as theoretical preparation for demonstrations in the College High School classroom where the human element inevitably becomes the final arbiter of educational values. The closest possible correlation of theory and practice is, thus, achieved. Teacher training and educational research gain a realistic foundation in their observed benefits to youth of high-school age.

Organizationally, too, the College High School is a component part of the total program of teacher education. The director, who plans and administers the six-year secondary curriculum, is also a teaching member of the College faculty. Heads of subject-matter departments in the College also serve as heads of the corresponding departments of the College High School. College faculty members are responsible for all high-school instruction.

CREDITS AND STANDARDS

Credits

The College is organized on the semester basis. A semester-hour is to be interpreted as work done in the classroom for one hour a week during a period of eighteen weeks. The average student load for any one semester is sixteen semester-hours of prepared work a week. Thirty-two semester-hour credits should be earned during each college year. A total of one hundred and twenty-eight semester-hours

is required for graduation. Permission to carry more than the customary amount of work is granted only to those who have demonstrated marked ability. It is definitely understood that students are retained in the College only so long as they do satisfactory work.

Rating System

Marks indicating degrees of achievement in the various courses are given in letters, A. B. C. D., and F.

A—Excellent

B—Good

C—Fair

D—Poor

F—Failure

Inc.—Incomplete work

WP.—Withdrawn, Passing

WF.—Withdrawn, failing

Where a student has had an unavoidable absence, or for reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester. This mark must be removed by a final grade within six weeks, or the course cannot be credited and the mark becomes "F."

Degree and Certificate

After satisfactory completion of all requirements for graduation the degree of Bachelor of Arts is granted.

Those who complete requirements for a degree at Montclair State College also qualify for a standard Certificate to teach the subjects of the major in grades 7-12 in the schools of New Jersey and for certain major subjects in the elementary schools. The Montclair graduate is eligible for a Limited Secondary Certificate. Those graduates who complete courses prescribed by the State Board of Education are also eligible for a limited elementary endorsement on the Secondary Certificate.

Weighted Scores

For purposes of striking averages and obtaining rankings, marks receive the following weighted scores for a semester-hour: A, +4; B, +3; C, +2; D, +1; F, 0.

Scholastic Honors

Students graduating with point averages of 3.45 or better for all undergraduate courses completed at Montclair are recognized as honor students with the following designations:

Average of 3.45—3.64—*cum laude*

Average of 3.65—3.84—*magna cum laude*

Average of 3.85—4.0 —*summa cum laude*

Requirements for Graduation and Bachelor of Arts Degree

A major requiring a minimum of thirty semester-hours.

A minor of eighteen to twenty-one semester-hours leading to certification to teach the additional subject of the minor may be completed in some curricula by use of elective options.

Additional credits in required and elective work to total one hundred twenty-eight semester-hours.

Two semester-hours of work in physical education.

A minimum of twenty-four semester-hours of resident work which must be completed during the student's final year at the College.

A minimum of 150 clock-hours of student-teaching to satisfy the State requirement.

Scholastic Standards

Comprehensive evaluation of the student's academic standing is indicated in his grade point average. The numerical equivalents for determining grade point average follows: A, +4; B, +3; C, +2; D, +1; F, 0.

Students must maintain cumulative grade point averages as follows:

For sophomore standing, the student must have completed at least 26 credit hours with a 1.6 average.

For junior standing, 58 credit hours with a 1.8 average.

For senior standing, 90 credit hours with a 2.0 average.

For graduation, 128 credit hours with a 2.0 average.

The grade point average is determined by dividing the total grade points earned by the total number of semester-hours, whether passed or failed.

Transfer students will not be accepted unless they have a cumulative grade point average of at least 2.0. Transfer credit will not be allowed for letter grades below "C."

Grade Reports

Grade reports are regularly issued at the end of each semester. These reports indicate grade received in each course for which the student was registered, grade point average for the semester, and the cumulative grade point average. These reports are sent to each student at the address indicated by the student.

Reports of progress at mid-term each semester are given by faculty for the purpose of advisement to students who may not be doing satisfactory work. These reports are collected by the Dean of Students and are referred to the faculty advisers for use in consultation with students. In the case of a serious deficiency which may endanger a student's retention in College, notice is given to the student's parents or guardians informing them of the situation.

Probation

Any student whose grade-point average for a semester or for the cumulative record falls below the 2.0 mark is placed on probation for the succeeding semester.

This is in the nature of a warning that work must be improved in order for the student to be retained in the College. Usually students are not permitted to remain in College on probation for more than two consecutive semesters.

Each semester the records of the students on probation are reviewed by the Dean of the College and the Dean of Students in consultation with the adviser and chairman of the student's major department. Students may be dropped from College for failure to attain the standards noted above. Students who are on probation are not permitted to engage in intercollegiate competition or varsity sport teams.

The parent or guardian is notified whenever a student is placed on probation or dismissed from the College for low scholarship. If the student is twenty-one years of age or over or is independent of parental supervision and support, he is excluded from this policy.

Honors Program

In the fall of 1960 an Honors Program was inaugurated. Freshmen qualifying for Honors are exempt from the elementary *Fundamentals of Writing* (ENGLISH 100C) and *Western World Literature* (ENGLISH 100G) courses, generally required, and instead read extensively and intensively great works of world literature in the course, ENGLISH 100A and 100B, *World Literature: Its Forms and Its Masters*. The course, SOCIAL STUDIES 100A and 100B, *Development of World Civilization*, also entails work of quality and extent beyond that of regular freshmen. A weekly seminar on the topic, "Man's Search for Truth," under the leadership of invited specialists supplements the seminars in World Literature and World Civilization. Otherwise, Honors freshmen pursue the regular courses of their respective majors.

Present plans call for later additions to the freshman offerings and for the program to ascend one class level each year until a comprehensive Honors Program is operating from the freshman through the senior year.

PROFESSIONAL BACKGROUND COURSES

GENERAL EDUCATION

The objectives and philosophy of the courses in general education have been discussed in the section headed "Fields of Instruction." The outline of curriculum requirements shows that forty-eight semester-hours out of the total of 128 semester-hours required for graduation are included in the requirements for general education.

These courses are grouped in four principal areas as follows: Social Studies, Humanities including communications, Mathematics and Sciences, and Mental and Physical Health. The course descriptions indicate the contributions of each one to the development of the general cultural background deemed a necessary part of the preparation of every teacher regardless of level of teaching or of subject specialization to be taught. The order of inclusion of these courses in each curriculum is found in the outline of sequence of courses under each major department.

GROUP I. Social Studies**SOCIAL STUDIES 100A and 100B. *The Development of World Civilization***

This course is designed to use the historical approach to study the contemporary cultural complex. Study is made of the cultures which have gone into the making of the present world cultures, especially but not exclusively, Western Civilization.

Credit: 3 semester-hours each

SOCIAL STUDIES 200A and 200B. *Contemporary American Life.*

This two-semester course introduces the student to a broad area of social science, rather than to economics, political science, and sociology as such. An attempt is made to acquaint students with the basic premises of our democratic society, as well as the nature and structure of our social, economic, and political institutions. Emphasis is placed upon the changing character of our society and the relationships which exist between social, economic, and political problems. The course seeks to prepare students to cope with some of their individual problems and to equip them for active citizenship.

Types of social organization are considered, along with examples of social disorganization. The connection between governmental functions and social problems is explored. The distinctive characteristics of the American economy are studied, and economic groups and governmental economic policies are treated. Attention is focused upon democratic government as it functions in the United States. This includes a study of public opinion, pressure groups, and political parties, as well as the framework of government. Throughout the course an effort is made to show the problems of contemporary American life in relation to those of other nations.

In the presentation of this course, the usual classroom procedures are supplemented by the requirement that each student gain some knowledge through his own investigation and participation. Attendance at court sessions, municipal government meetings, and political rallies; observation of welfare and labor-management agencies in action; and consultation with representatives of business, government, labor, and social agencies are required of each student. A special effort is made to provide an opportunity for students to meet in seminars with representatives of the United Nations.

Credit: 3 semester-hours each

GROUP II. Humanities

There are seven courses required in this group. These courses are concerned (1) with furnishing materials of background and critical principles that insure a knowledge of the great masters of literature, art, and music of the world; appreciation of the literary forms which they created; and a feeling for the best in modern life and thought, and (2) with developing the power of communication in speech and writing.

ENGLISH 100C. *Fundamentals of Writing*

The purpose of this course is to increase the student's skill in the art of thinking and to enable him to express his ideas clearly in written form. There is regular practice in expository writing, stimulated by collateral reading and discussion. Problems in diction, outlining, organization, and development are explored, and **the individual student is helped to overcome his deficiencies in mechanics and technique.** The course culminates in the writing of a research paper and the study of note-taking and elementary research procedures.

Credit: 3 semester-hours

SPEECH 100D. *Fundamentals of Speech*

This basic course is designed to help the prospective teacher to improve his ability in speaking. Effective voice production and clear, pleasing diction are developed through speech activities. The work of the course is adapted to the individual needs of the students as revealed by phonograph recordings and diagnostic tests. The work may include prescribed additional practice in the speech laboratory. Failure to achieve an acceptable standard of performance results in the withholding of credit until the student demonstrates satisfactory achievement.

Credit: 3 semester-hours

ENGLISH 100G. *Western World Literature*

The aim of this course is to introduce the student to representative works of literature of the western world, chosen from each of the cultural epochs—Hebrew, Greek, Roman, Medieval, Renaissance, Neo-Classical, Romantic, and Modern.

Credit: 3 semester-hours

LANGUAGE 300. *Foundations of Language*

The purpose of this course is to give every student, as a prospective teacher, (1) a survey of the background, growth, and structure of the English language from its Indo-European origin to modern times, (2) an introduction to the science of linguistics, (3) an appreciation of several foreign language patterns, and (4) a rich fund of information in the field of general language.

Credit: 2 semester-hours

FINE ARTS 100. *Introduction to the Visual Arts*

This course is required of all students except those majoring in fine arts. The ways in which man has expressed himself in the many forms of the visual arts including painting, ceramics, sculpture, weaving, print making, architecture, the theater, motion pictures, and photography, are explored through studio work, demonstrations by artists and craftsmen, reading, discussion, and trips to art sources. Emphasis is placed upon the development of an understanding of the nature of art and the experiences of art, their significance to the individual, and their role in a culture.

Credit: 3 semester-hours

MUSIC 100. *Music Appreciation*

This course aims to help the student discover music for himself and to use it as a vital force in life enrichment. Emphasis is placed upon stimulating the enjoyment of music rather than on building up a body of facts about it. By means of musical performance by the instructor and students and by directed listening to recorded music and to the radio and television, the student is acquainted with masterpieces of music which should be the possession of every generally cultured person.

Credit: 2 semester-hours

Required Elective in Humanities

In addition to the required general education courses in the humanities each student is required to select one two-point elective in this area of work. Students will make selections from a variety of elective offerings.

GROUP III. Science and Mathematics

As his cultural background work in science, the student surveys the earth sciences (100C), either physical science (100A), or biology (100B).

SCIENCE 100A. *Physical Science*

This course deals with the basic scientific discoveries which have created present-day activities in the fields of astronomy, atomic energy, and meteorology. The social, economic, and educational consequences of these discoveries and the industries growing out of them are treated in such detail as to be of service to prospective teachers of social studies, English, languages, and other subjects.

Credit: 4 semester-hours

SCIENCE 100B. *Biological Science*

The organization and behavior of plants and animals are treated in a manner devised to develop understanding of man's structure and behavior. Mechanisms of heredity and evolutionary change are considered. An understanding of how a balance may be achieved among living things is developed to show desirable land use and good agricultural and forest practices. Class lectures and discussions are supplemented with lantern slides, moving pictures, laboratory experiments, and field trips.

Credit: 4 semester-hours

SCIENCE 100C. *The Earth Sciences*

Land forms and water bodies are treated from the standpoint of origin and evolution, and, together with the atmosphere, are considered in relation to their influence upon life and activities. The laboratory work consists of the study of topographic maps, models, and other methods of illustration. This course affords excellent background for all courses in geography.

Credit: 2 semester-hours

MATHEMATICS 300. *The Social Uses of Mathematics*

This course is concerned with mathematical concepts that help the student to become more effective in his daily living. Among the topics covered are: The fundamental processes of arithmetic and elementary algebra, percentage, simple and compound interest, consumer credit and installment buying, savings and investments, mortgages, pensions, annuities, social security, taxation, and insurance.

Credit: 2 semester-hours

MATHEMATICS 400. *Educational Statistics*

This course is concerned with the basic concepts of statistical reasoning as it contributes to an understanding of today's social, economic, and educational problems and theories. One area covered is descriptive statistics: the systematic organization, analysis, and presentation of data. A second is sampling theory, including the application of the binomial, Poisson, and normal distribution. Finally, there is an introduction to the general problem of statistical inference, including the use of confidence intervals, test hypotheses, and decision theory.

Credit: 2 semester-hours

Required Elective in Mathematics or Science

In addition to the required general education courses in mathematics and science, each student is required to select one two-point elective in either mathematics or science. Students will make selections from a variety of elective offerings.

GROUP IV. Mental and Physical Health**EDUCATION 100. *Mental Hygiene and Personal Adjustment***

For a description of this course see page 57.

Credit: 2 semester-hours

HEALTH EDUCATION 100. *Healthful Living*

The purpose of this course is to aid the student in achieving and maintaining optimum health and to understand the principles on which it is founded. Among the topics covered are: prevention and treatment of diseases, grooming, nutrition and weight control, the effects of alcohol and narcotics, marriage and parenthood, and the community aspects of health.

Credit: 2 semester-hours

PHYSICAL EDUCATION 100A and 100B. *Physical Education Activities*

The work of the freshman year consists of an orientation program whereby the students are provided with an opportunity to become acquainted with a variety of team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: $\frac{1}{2}$ semester-hour each

PHYSICAL EDUCATION 200A and 200B. *Physical Education Activities*

The work of the sophomore year permits the student to select within a given pattern team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: $\frac{1}{2}$ semester-hour each

THE DEPARTMENT OF EDUCATION

Even though the principal function of the entire College is educational, there is a Department of Education which integrates the work of the entire College by coordinating all the professional aspects of training such as subject-matter, teaching techniques, observation, and student teaching. The Department carries out its responsibility through: the courses in education, the College High School, the student teaching program, and the placement and professional adjustment services. The work of these agencies transcends all departmental lines; the special interests and functions of any one department contribute to the professional aims of the institution which are broader in scope and purpose than those of any of the subdivisions of the College.

Since the main purpose of the College is professional, departmental aims are identical or similar. Hence the aims of the Department of Education are not exclusively its own. Its chief and particular function, however, is to assist and to give leadership in the following ways:

- (1) It helps the prospective teacher to take an intelligent and active part in his own personal and professional orientation.
- (2) It arouses an awareness of the possibilities of the profession of teaching as an opportunity to invest one's interests and powers in promoting the social good.
- (3) It gives an understanding of both elementary-school and high-school students, their natures, interests, and needs.
- (4) It provides for a gradual induction into the profession of teaching by means of a carefully arranged sequence of education courses, by observation of and participation in school classwork.
- (5) It directs the student as he becomes an active and responsible teacher in the student-teaching program.
- (6) It provides an analysis of the student teaching experiences.
- (7) It aids in coordinating the work of the college departments through its integrating functions.
- (8) It provides training which will aid the student in taking an active part in the extracurricular life of the school and in community life.
- (9) It gives a forward look into the profession so that it shall be regarded as a worthy, life-time vocation.

The Department not only promotes the professional aspect through its materials and organization, but supplements the work of professionalization of all the departments.

Organization and Activities

The required courses in education have been designed to give a survey of the essentials of the professional aspects of teaching. Five points of view are em-

phasized: the sociological, the biological, the psychological, the pedagogical or technical, and the philosophical. Although in a given semester course only one or two of these fields receive special emphasis, the content is not limited to them. There is rather the attempt throughout to conduct an integrated treatment of professional problems.

Special attention has been given to the sequence of the required courses and to the units within courses. In so far as it is administratively possible and expedient, courses in education parallel those in other departments. In this way the various departmental courses reinforce and supplement each other.

In the organization of all courses the needs of society and the needs and interests of the students are considered. Content material is taught, not as detached from the student's everyday world, but as part of his professional life in pre-service training. Both logical and psychological organizations are utilized, the former for completeness and unity, the latter for vitality.

The work in psychology includes some opportunity for firsthand observation of children and adolescents in their homes, on the playground and in other out-of-school settings, and in school. The aim is to acquaint the student, through any means available, with stages in normal development from infancy through adolescence. An effort is made to build an understanding of what is involved in the psychological development of the individual and a basic understanding of the needs of children and adolescents together with some insight into the resources through which these needs may be satisfied. Special emphasis is given to the particular problems encountered in school situations.

Observation and participation in the College High School occupy a large place in the courses in educational integration. It is through personal contact with pupils and with actual school conditions that an understanding of the meaning of educational theory is developed.

Principally for the purpose of orientation, freshmen are assigned to a limited number of observations in College High School. An organized experience in community social agencies is required as part of the pre-professional education of all students. This normally takes place during the freshman year.

Sophomores are assigned to the study of specific, individual College High School students.

Juniors are assigned by their major departments to specific demonstration teachers for a series of carefully planned observation and participation experiences. Also, all juniors spend one week, full-time, in a public school observing and participating in the teaching.

Seniors are assigned to the College High School demonstration classes taught by their special departmental methods course instructors. During the senior year the emphasis is on relating the activities of the demonstration class to the work done in the methods courses.

Immediately preceding the work in student-teaching offered in the senior year, a course in the *Development of Educational Thought* is given. The major purpose of this course is to study with the student those basic and fundamental principles that should guide our secondary schools.

STUDENT TEACHING

The plan of student-teaching which the College carries out is based upon the principle of internship. At the beginning of their student-teaching experience the students leave the campus and take up the work of teaching in the public schools of New Jersey. Each student is assigned to an experienced teacher in a secondary school, under whose guidance he observes, participates, and teaches. Students whose major subject certification includes the elementary school are also assigned to an experienced elementary-school teacher for a comprehensive experience covering all grade levels.

The student spends the first week in observation and participation, then gradually takes over teaching responsibilities—one class, then two, then three. For the last weeks of the period in each school he has full responsibility for certain classes. Homeroom guidance, club work, student council meetings, and all the extra-classroom activities which round out the program of the modern public school are a part of his privileges and responsibilities.

The student returns from this experience with a new point of view and a new spirit. He has actual knowledge of the responsibilities of the teacher; his perspective is broadened; he has begun the development of his teaching skills; and he has a new insight into the psychology of the growing child.

Following the student-teaching period students return to the campus for an intensive study of the practical problems of teaching.

Supervision of Student-Teaching

During the period of responsible student teaching each student is frequently visited at work by members of the college faculty—representatives of the subject-matter departments and the Department of Education. Individual and group conferences, and other approved supervisory techniques are employed in the improvement of teaching ability.

At the half-way point in the practice period the students return to the campus for a conference. General discussion, group meetings, and individual consultation with the staff members afford an opportunity for clearing up problems and difficulties which the students have encountered in the field.

REQUIRED COURSES

Courses numbered EDUCATION 100, 201, 202, 303, 304, 401, 403, and an education elective are required of all students; courses numbered otherwise are elective.

THE FIRST YEAR

EDUCATION 100. *Mental Hygiene and Personal Adjustment*

The course in mental hygiene and personal adjustment offers an accumulation of suggestions from psychological, biological, sociological, and educational literature which the college student may use in building his personality with the

facilities available on the campus. Problems of human relationships and general orientation in college and in life are discussed.

Credit: 2 semester-hours

THE SECOND YEAR

EDUCATION 201 and 202. *Human Development and Behavior*, Part I and Part II

These courses survey the psychological aspects of development and behavior from the prenatal period through adolescence. Emphasis is placed upon physical, emotional, intellectual, and social growth and development; the learning process with applications to educational situations; personal and social adjustments as they are found in the home, school, and community; guided observations of individual children and adolescents, designed to furnish substance to classroom discussions and to help the student gain further understanding of human behavior.

Credit: 3 semester-hours each

THE THIRD YEAR

EDUCATION 303. *The Teacher in School and Community*

This course provides the prospective teacher with a knowledge and understanding of the following areas of professional concern: (1) the organization and role of the public school in American society, (2) the nature of teaching as a profession, (3) the evolving role of the school in community improvement, and (4) the function of the teacher in school-community relations.

Credit: 3 semester hours

EDUCATION 304. *Principles and Techniques of Secondary Education*

This course provides the student with a basic orientation in the following areas of professional concern: (1) the teacher's role in the teaching-learning process; (2) the sources, selection, and use of teaching aids; (3) the routine activities and auxiliary responsibilities of the teacher; and (4) the development and maintenance of desirable pupil behavior.

Credit: 3 semester-hours

Majors in subjects providing certification in elementary and secondary schools will take the following course in place of EDUCATION 304.

EDUCATION 304X. *Principles and Methods of Teaching*

This course is concerned with the principles and methods of teaching at all grade levels, both elementary and secondary. Points of similarity and difference in teaching at the different levels are stressed.

Credit: 3 semester-hours

THE FOURTH YEAR**EDUCATION 401. *The Development of Educational Thought***

The purpose of this course is to study the major philosophical traditions and their educational implications in order to assist the student to develop his own philosophy of education. These philosophical traditions are studied in their historical and contemporary contexts through texts and supplementary readings.

Credit: 3 semester-hours

EDUCATION 403. *Supervised Student Teaching*

Ten weeks of student teaching in the public schools of New Jersey are required of all students who complete the regular program of graduation requirements. A complete description is given on page 57.

Credit: 8 semester-hours

EDUCATION ELECTIVES

Each student will select one of the following three semester-hour elective courses to complete the required work in the Education Department.

EDUCATION 404. *Cocurricular Activities in the Secondary School*

This course is designed as an introduction to that part of the total school program falling outside of the area of regularly scheduled classes. A study is made of the role of the faculty adviser. The more usual cocurricular activities are considered.

Credit: 3 semester-hours

EDUCATION 405. *Teaching the Block-of-Time Program in the Secondary School*

Following a study of the philosophical and psychological bases of the block-of-time program, major emphasis is placed on the methodological problems involved in teaching the program and the development of resource units for use at different levels.

This course is open only to those students who have a major-minor combination of English and social studies.

Credit: 3 semester-hours

EDUCATION 406. *Educational Sociology*

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

Credit: 3 semester-hours

EDUCATION 415. *Seminar in the Problems of a Classroom Teacher*

This seminar deals with the problems commonly encountered by beginning teachers. It considers problems of classroom management, student behavior, teaching methods, teaching materials, curriculum adaptations, and the relation of the teacher to the total school community. It provides each student with an opportunity to analyze, evaluate, and discuss his own student-teaching experiences. It also makes provision for planning for the student's approaching employment as a teacher.

Credit: 3 semester-hours

EDUCATION 450. *Psychological Foundations of Personality*

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation are considered.

Credit: 3 semester-hours

EDUCATION 451. *Guidance for the Classroom Teacher*

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what it is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor.

Credit: 3 semester-hours

EDUCATION 452. *Psychology and Education of the Handicapped*

This course is designed for the preparation of teachers of handicapped children and youth. It also serves to orient prospective teachers of regular classes to the special needs of those with handicaps of sensory, motor, intellectual, emotional, and neurological origins. Both the theoretical psychological aspects and the practical applications to the classroom situation are studied. The course includes analysis of case material.

Credit: 3 semester-hours

EDUCATION 453. *Social Psychology*

This course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues.

Credit: 3 semester-hours

EDUCATION 461. *The Junior High School Curriculum*

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior

high school are the topics covered in this course. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

Credit: 3 semester-hours

EDUCATION 462. *Survey of Reading Methods in Secondary School Subjects*

Planned especially for inexperienced teachers in all subject-matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. Attention is given to self-improvement problems and practices through the facilities of the College Reading Laboratory. New teachers will have the opportunity to become familiar with: the physiology of reading; the use of speed instruments and films; special reading techniques needed in each subject; and the responsibilities every teacher has as a teacher of the reading of his own subject materials.

Credit: 3 semester-hours

EDUCATION 491. *Measurement and Evaluation in Teaching and Learning*

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas and in appraising, marking, and reporting pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles test scores, and interprets test data.

Credit: 3 semester-hours

OTHER COURSES IN EDUCATION

The following courses are elective. They cover various phases of education and supplement the work already described. Electives are offered in the junior, senior, and graduate years only.

EDUCATION 302A. *Television in Education Workshop, I*

This is an experimental workshop course for students on the undergraduate level in which a study is made of the educational implications of television through the use of television studio equipment, utilizing the resources of all departments of the college, student potentialities, campus life, and the community. Actual training is given in the use of television equipment, planning, script writing, and programming in relation to classroom use on all grade levels in the schools. Trips are made to television laboratories and studios. Laboratory procedures are followed.

Credit: 2 semester-hours

EDUCATION 302B. *Television in Education Workshop, II*

This is a continuation of Ed. 302A, the experimental workshop course, and is designed for students on the undergraduate level who have had the basic foundations of television techniques. The course is devoted to an intensive study of the educational implications of television through the evaluation of current commercial offerings and to the production of experimental educational programs in various subject matter areas. Laboratory procedures are followed, and students are expected to select an area for specialized work. Students are also given the opportunity to gain further experience in fundamental techniques by serving as assistants to the instructors in the basic course.

Credit: 2 semester-hours

EDUCATION 407A. *Television in Education Workshop: Programming and Production*

This is a laboratory course designed to develop the techniques, methods, standards, procedures, and criteria pertaining to the special place of television in education. Through the utilization of studio equipment together with the resources of all the academic departments of the college, student potentialities, campus life, and the community, students receive experience in planning, developing, and producing, television programs of educational value. Actual training is given in the use of standard television equipment on campus, and field trips are made to local television laboratories and studios.

Credit: 2 semester-hours

EDUCATION 407B. *Television in Education Workshop: Classroom Utilization*

This course is designed to give training in the following areas of television education: types of programs best suited for classroom use; practical applications of programs emanating from commercial stations; various subject areas in which television might be used such as language, science, art, social studies, etc.; script writing; coordination of program and school schedules; and the possible use of educational television stations and how they can best serve surrounding communities. Students are also introduced to the operation of both sending and receiving television equipment so that they may understand program possibilities and limitations.

Credit: 2 semester-hours

EDUCATION 408. *Selection and Utilization of Audio-Visual Materials*

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

Credit: 2 semester-hours

EDUCATION 409. *Radio and Sound Equipment in the Classroom*

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

Credit: 2 semester-hours

EDUCATION 410. *Teaching Materials Workshop*

This course is for those persons who wish to study advanced problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken EDUCATION 408 or will have had the equivalent in practical experiences.

Credit: 2 semester-hours

EDUCATION 411. *Educational Motion-Picture Workshop*

This course includes various phases of the planning and production of educational motion pictures. Students receive actual experience in scenario writing, costume research, set designing, lighting, photography, editing, and sound recording. During the course an educational film is produced as a class project.

Credit: 2 semester-hours

EDUCATION 420A and 420B. *The Community Centered School*

This course deals with the development and functions of the school as a community resource. Students assemble and interpret data relating to actual school and neighborhood situations. Consideration is given to the social framework in which the school operates; racial and national minorities; intercultural education; truancy and delinquency; and the discovery and utilization of community resources. The use of school personnel and facilities to deal with racial problems is treated in light of the data assembled.

Credit: 2 semester-hours each

EDUCATION 421A and 421B. *Leadership of Activities and Services in Community Education*

This course is designed to prepare teachers and others to give leadership to community-education activities. Starting with the assumption that the school should serve as a community center, members of the course proceed to learn about the various activities and programs that can be initiated and carried on by the school. Consideration is given to programming, utilization of space and personnel, and care of equipment. Techniques for organizing and directing special

programs such as scouting, folk dancing, crafts, field trips, production of films, forums and debates, etc., are included.

Credit: 2 semester-hours each

EDUCATION 422A and 422B. *The Organization, Administration, and Supervision of Programs in Community Education*

This is a workshop type of course which emphasizes the integration of school, social, recreational, and adult education programs. The course presents a survey of current trends in community education as adopted and implemented by boards of education throughout the country. Principles, policies, practices, and problems related to the administration and supervision of community-education programs are surveyed. The following types of programs are considered: summer playgrounds, day camps, after-school centers, evening centers, youth and adult recreation centers.

Credit: 2 semester-hours each

EDUCATION 440. *Camping and Outdoor Education*

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

Credit: 2 semester-hours

EDUCATION 441. *Conservation Education*

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these resources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

Credit: 2 semester-hours

EDUCATION 442. *Practicum in Camp Leadership*

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

Credit: 2 semester-hours

EDUCATION 444. Practicum in Conservation Education

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participation in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion.

Prerequisite: EDUCATION 441, *Conservation Education*, or Science 412, *Field Studies in Science: Biological*, or Science 413, *Field Studies in Science: Physical*, or the equivalent

Credit: 2 semester-hours

ELEMENTARY EDUCATION COURSES

Although the Montclair State College is engaged primarily in preparing secondary-school teachers, during the present shortage of teachers in the elementary schools it is deemed expedient to offer courses in the field of elementary education for the undergraduates of the college leading toward certification to teach in these schools.

EDUCATION 472. *Elementary School Curriculum*

This course acquaints the College student with the subject-matter of the elementary school curriculum for grades 3-6 inclusive. In addition, the following are studied: (1) correlation among subjects, (2) the appraisal and use of textbooks, (3) the use of visual aids, (4) the methods adapted to each subject, and (5) use of course of study materials.

Credit: 2 semester-hours

EDUCATION 473. *Elementary School Language Arts*

This course gives an overview of modern practices that are used in teaching reading, creative writing, speaking, spelling, and handwriting in the elementary grades. Students are helped to recognize and to make provision for readiness for learning in these areas, to learn or devise various techniques that will meet the needs of different children and situations, and to evaluate, select, and create suitable materials to be used at various maturity levels. Special emphasis is placed on the functional use of the language arts in the total curriculum and life of the elementary-school child.

Credit: 2 semester-hours

EDUCATION 480. *Field Science for Elementary Teachers*

Working in a natural setting, rather than an artificial laboratory, this course stresses firsthand experience with natural phenomena and suggests what can be done to convey an understanding of these things to the elementary-school student.

In developing an understanding of natural resources consideration is given to such areas as rocks and minerals, plant and animal life, astronomy, weather, and all outdoor phenomena, both physical and biological. If desired, collections are made under supervision, and some latitude is provided for individual specialization in some phase of field science. The student needs no formal scientific background for this course. Methods of teaching on the elementary-school level as well as subject-matter content are included. Simple demonstrations, experiments, collections, acquisition of free and inexpensive materials, reference publications, and the most recent methods and trends in field-trip procedure are considered.

Credit: 2 semester-hours

PROFESSIONAL SUBJECT-MATTER COURSES

Fields of Specialization

Professional subject-matter courses offer opportunities for students to major in the Departments of Business Education, English, Fine Arts, Home Economics, Industrial Arts, Languages, Mathematics, Music, Physical Education and Hygiene, Science, Social Studies, and Speech, and to minor in the fields of Accounting and Business Practice, Biological Science, Physical Science, English, Geography, History, Languages, Mathematics, Political Science and Economics, Secretarial Studies, Social Business Studies, and Speech. The minimum requirement for a major is thirty semester-hours. The minimum requirement for a minor is eighteen semester-hours. Electives may be used outside the major and minor fields of interest, thereby increasing the areas of certification.

THE DEPARTMENT OF BUSINESS EDUCATION

Montclair State College is now the only state college in the northern section of New Jersey that trains business-education teachers. The Business Education Department prepares teachers who are qualified to teach all of the business-education subjects usually offered in most high schools.

Every business-education major is certified to teach typewriting and the general business-education subjects. In addition, every major selects one of the following two areas of specialization: (1) accounting, (2) secretarial studies.

Students majoring in other departments of the College can minor in: (1) secretarial studies, (2) social business studies, (3) accounting.

All of the work in the Business Education Department is open to students who have never studied business-education subjects in high school. Students who can type, write Gregg shorthand, or do accounting with a reasonable degree of speed and accuracy may be exempt from the first courses upon the successful completion of placement examinations given during the first week of classes.

BUSINESS EDUCATION MAJOR

Specialization in Accounting

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 100A <i>Dev. of World Civiliza-</i>		Soc. St. 100B <i>Dev. of World Civiliza-</i>	
<i>tion</i>	3	<i>tion</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100A <i>Phys. Science or</i>	4
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2	Sci. 100B <i>Biological Science</i>	
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Mus. 100 <i>Music Appreciation</i>	2
B.E. 101 BUSINESS ORG. & MANAGE-		Math. 300 <i>Social Uses of Mathematics</i>	2
MENT	3	B.E. 104 TYPEWRITING, II	2
B.E. 103 TYPEWRITING, I	0		
	16 1/2		16 1/2

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i> ..	1/2	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 200A <i>Contemporary American</i>		Soc. St. 200B <i>Contemporary American</i>	
<i>Life</i>	3	<i>Life</i>	3
Ed. 201 <i>Human Dev. & Behavior</i>	3	Ed. 202 <i>Human Dev. & Behavior</i>	3
Eng. 100G <i>Western World Literature</i>	3	H.Ed. 100 <i>Healthful Living</i>	2
Elective	2-3	Elective	2-3
B.E. 201 ACCOUNTING, I ..	3	B.E. 202 ACCOUNTING, II	3
B.E. 203 TYPEWRITING, III	1 1/2	B.E. 408 BUSINESS FINANCE	3
Observations	0	Observations	0
	16-17		16 1/2-17 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Commu-</i>		Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
<i>nity</i>	3	Math. 400 <i>Statistics</i>	2
Lang. 300 <i>Foundations of Language</i>	2	Electives	2-5
Elective	2-3	B.E. 306 BUSINESS LAW, II	3
B.E. 305 BUSINESS LAW, I	3	B.E. 204 TYPEWRITING, IV (Methods)	1 1/2
B.E. 301 ACCOUNTING, III	3	B.E. 409 CONSUMER EDUCATION.....	3
B.E. 308 ECONOMIC GEOGRAPHY	3	Observations	0
Observations	0		
	16-17		14 1/2-17 1/2

Supervised Work Experience—Summer—0

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective in <i>Mathematics or Science</i>	2	Ed. 4— <i>Education Elective</i>	3
Elective	2	Elective in <i>Humanities</i>	2
B.E. 401A MATERIALS & METHODS		Elective	2
OF TCHG GENERAL BUSINESS	3		
B.E. 405 OFFICE PRACTICE—CLERI-			15
CAL	3		
B.E. 302 ACCOUNTING, IV (Meth-			
ods)	4		
Observations	0		
	17		

Total semester-hours—128

BUSINESS EDUCATION MAJOR

Specialization in Secretarial Studies

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i> ..	3
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100A <i>Physical Science</i> or	4
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i> ..	2	Sci. 100B <i>Biological Science</i>	
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Mus. 100 <i>Music Appreciation</i>	2
B.E. 101 BUSINESS ORG. & MANAGEMENT	3	Math. 300 <i>Social Uses of Mathematics</i> ..	2
B.E. 103 TYPEWRITING, I	0	B.E. 104 TYPEWRITING, II	2
	16½		16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i> ..	3	Ed. 202 <i>Human Dev. & Behavior, II</i> ..	3
Elective	2	Elective	2-3
B.E. 201 ACCOUNTING, I	3	Eng. 100G <i>Western World Literature</i> ..	3
B.E. 203 TYPEWRITING, III	1½	H. Ed. 100 <i>Healthful Living</i>	2
B.E. 205 STENOGRAPHY, I	4	B.E. 206 STENOGRAPHY, II	3
Observations	0	Observations	0
	17		16½ or 17½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i> ..	3
Lang. 300 <i>Foundations of Language</i> ..	2	Math. 400 <i>Statistics</i>	2
Elective	2-3	Electives	2-5
B.E. 305 BUSINESS LAW, I	3	B.E. 204 TYPEWRITING, IV (Methods) ..	1½
B.E. 303 STENOGRAPHY & TRANSCRIPTION, I	3	B.E. 409 CONSUMER EDUCATION	3
B.E. 308 ECONOMIC GEOGRAPHY	3	B.E. 407 OFFICE PRACTICE—SECRETARIAL ..	3
Observations	0	Observations	0
	16-17		14½-17½

Supervised Work Experience—Summer—0

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i> ..	3	Ed. 403 <i>Student Teaching</i>	8
Elective in <i>Mathematics or Science</i>	2	Ed. 4— <i>Education Elective</i>	3
Elective	2-3	Elective in <i>Humanities</i>	2
B.E. 401A MATERIALS & METHODS OF TCHG. GENERAL BUSINESS	3	Elective	2-4
B.E. 304 STENOGRAPHY & TRANSCRIPTION II (Methods)	3		15-17
B.E. 405 OFFICE PRACTICE—CLERICAL	3		
Observations	0		
	16-17		

Total semester-hours—128

Minors in the Department of Business Education

The following courses are required in the various business-education minor fields:

Secretarial Studies Minor Sequence for Majors in Departments Other Than Business Education

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Bus. Ed. 103 <i>Typewriting, I</i>	0*	Bus. Ed. 104 <i>Typewriting, II</i>	2*
Bus. Ed. 205 <i>Stenography, I</i>	4*	Bus. Ed. 206 <i>Stenography, II</i>	3*

JUNIOR YEAR

Bus. Ed. 203 <i>Typewriting, III</i>	1½	Bus. Ed. 204 <i>Typewriting, IV (Methods)</i>	1½
Bus. Ed. 303 <i>Steno. & Transcription, I</i>	3	Bus. Ed. 407 <i>Office Practice-Secretarial</i>	3

SENIOR YEAR

Bus. Ed. 304 <i>Stenography & Transcription II (Methods)</i>	3
Bus. Ed. 405 <i>Office Practice—Clerical</i>	3 or

Total semester-hours required—21

* May be waived by permission from the Department Chairman and other business elective substituted.

Social Business Minor Sequence for Majors in Departments Other Than Business Education

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Bus. Ed. 101 <i>Bus. Org. & Management</i>	3	Bus. Ed. 408 <i>Business Finance</i>	3

JUNIOR YEAR

Bus. Ed. 305 <i>Business, Law, I</i>	3	Bus. Ed. 306 <i>Business Law, II</i>	3
Bus. Ed. 308 <i>Economic Geography</i>	3	Bus. Ed. 409 <i>Consumer Education</i>	3

SENIOR YEAR

Bus. Ed. 401A <i>Materials & Methods of Teaching Gen. Business</i>	3
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Total semester-hours required—21

Accounting Minor Sequence for Majors in Departments Other Than Business Education

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Bus. Ed. 201 <i>Accounting, I</i>	3*	Bus. Ed. 202 <i>Accounting, II</i>	3*

JUNIOR YEAR

Bus. Ed. 301 <i>Accounting, III</i>	3	Bus. Ed. 408 <i>Business Finance</i>	3
Bus. Ed. 305 <i>Business Law, I</i>	3		

SENIOR YEAR

Bus. Ed. 302 <i>Accounting, IV (Methods)</i>	4
Bus. Ed. 401A <i>Materials & Methods of Teaching General Business</i>	3

Total semester-hours required—22

* May be waived by permission from the Department Chairman and other business electives substituted.

All students majoring in the Business Education Department must complete ten weeks (400 hours) of practical business experience for certification. Specific directions are given by the Chairman of the Department.

All business-education majors also must observe business-education classes in various high schools. The details of this program are supplied by the Chairman of the Department.

All students majoring in the Business Education Department are required and all students minoring in the Department are invited to participate in the extra-curricular programs planned by the Department. Epsilon Mu Epsilon is the departmental club with membership open to all majors and minors. Students are given opportunities for leadership and social activities. Outstanding students receive invitations to become members in the Beta Sigma Chapter of Pi Omega Pi, the National Honorary Business Education Society.

FRESHMAN YEAR

BUSINESS EDUCATION 101. *Business Organization and Management*

This course is an introduction to the world of business. It goes into the functions of business, bank service, credit, investments, insurance, forms of business organization, personnel problems, transportation and communication.

Credit: 3 semester-hours

*BUSINESS EDUCATION 103. *Typewriting, I*

This is a course for freshman students who have had no previous typewriting instruction, or for those who have had typewriting in high school but who have failed to meet the placement examination standards. The keyboard is mastered by word-building and sentence-building techniques. Speed in typing these words and sentences is emphasized from the start, and accuracy is developed simultaneously by individual analysis of errors. At the end of the semester, the student has a basic facility in typing from straight copy, in setting up paragraph material in medium-length letters accurately on a business letterhead, and in typing term papers. With this training, the student should be able to use the typewriter for personal typing problems. This course meets for four periods per week.

No credit, first semester

*BUSINESS EDUCATION 104. *Typewriting, II*

The aim of this course is to increase the typing speed and ability of the student by stressing the need for accuracy in all material typed. Emphasis is placed upon expert proof reading before releasing any papers for approval by the instructor. Advanced letter forms, such as the block, full block, five-indent, and all variations of the modified block, are applied at frequent intervals to insure thorough recall. This course meets for four periods per week.

Credit: 2 semester-hours

* May be waived by permission from the Department Chairman and other business electives substituted.

SOPHOMORE YEAR***BUSINESS EDUCATION 201. *Accounting, I***

This is a basic course in accounting. It is designed for the student who has never studied bookkeeping. Emphasis is placed on developing a thorough understanding and mastery of the fundamental elements of bookkeeping and accounting. After analyzing the elementary accounting equations, the student learns to journalize, post, take a trial balance, and prepare financial statements, as applied to the sole proprietorship form of organization. Adequate training is provided through the use of numerous exercises and constant emphasis on developing an understanding of sound accounting theory and practice.

Credit: 3 semester-hours

BUSINESS EDUCATION 202. *Accounting, II

This course starts with a thorough review of the accounting cycle. The student learns to use special journals, controlling accounts, work sheets, classified statements, reserves, accruals, deferred items, reversals, special columns, and business papers. Special attention is given to the use of voucher system, pay-roll accounting, and accounting for taxes. Thorough analysis is made of partnership formation and operation, as well as partnership reorganization and dissolution.

Prerequisite: BUSINESS EDUCATION 201

Credit: 3 semester-hours

BUSINESS EDUCATION 203. *Typewriting, III*

Mastery of the keyboard and remedial treatment of any deficiencies in basic typewriting skills are emphasized in this course. Additional speed and accuracy are developed. Much time is spent on office typewriting skills including handling multiple carbons, preparing invoices, and other business forms. This course meets for three periods per week.

Credit: 1½ semester-hours

BUSINESS EDUCATION 205. *Stenography, I

The theory of Gregg stenography (Simplified) is taught in this beginning course. The student learns to read shorthand fluently and to take dictation on familiar material.

Credit: 4 semester-hours

BUSINESS EDUCATION 206. *Stenography, II

Gregg shorthand theory (Simplified) is thoroughly reviewed, and unfamiliar dictation is given at moderate speeds. At the same time vocabulary building is emphasized.

Prerequisite: BUSINESS EDUCATION 205 or college equivalent

Credit: 3 semester-hours

* May be waived by permission from the Department Chairman and other business electives substituted.

BUSINESS EDUCATION 408. *Business Finance*

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stock, borrowed capital, mortgages, bonds, and notes are solved.

Credit: 3 semester-hours

ELECTIVE**BUSINESS EDUCATION 208. *Salesmanship***

The principles of salesmanship in all types of selling activities are discussed. They are amplified and strengthened by individual selling demonstrations which require intensive study of the product to be sold in the demonstration and careful analysis of the desirable techniques for its sale. Visual aids and talks by salesmen, sales managers, and retail training directors add interest and purposefulness to the course.

Credit: 3 semester-hours

JUNIOR YEAR**BUSINESS EDUCATION 204 *Typewriting, IV (Methods)***

This course is a continuation of BUSINESS EDUCATION 203. It also includes the methods of teaching typewriting. This course meets for three periods per week.

Credit: 1½ semester-hours

BUSINESS EDUCATION 204X. *Typewriting Methods and Materials*

This course consists of examination of the objectives of the typewriting program in the secondary school; a study of the principles of skill building applicable to the study of typewriting, a consideration of the teaching aids and materials available to the teachers of typewriting; the determination of course content to meet the objectives of the program including both personal use and vocational typewriting; study and application of classroom procedures directed toward the ideal of carrying each student as far as he is able to go toward his personal goal. This course meets three periods per week.

Prerequisite: Evidence of satisfactory development of personal skill in typewriting. This evidence may be provided through conditions noted in a or b.

- a. Satisfactory completion of BUSINESS EDUCATION 203—*Typewriting III*. Mastery of the keyboard and remedial treatment of any deficiencies in basic typewriting skills are emphasized in this course. Additional speed and accuracy are developed. Much time is spent on office typewriting skills

including handling multiple carbons, preparing invoices, and other business forms. This course meets for three periods per week.

or

- b. Satisfactory completion of an equivalency test, such test to cover the units of high school typewriting and the care of the machine: Speed of at least fifty words a minute; letter-writing; tabulation; manuscript writing; multiple copies; preparation of spirit and stencil duplicating materials; business forms; changing the ribbon; care of the machine; parts of the machine.

Credit: 2 semester-hours

BUSINESS EDUCATION 301. *Accounting, III*

In this advanced course there is emphasis on all phases of corporate accounting, including: the formation of corporations; corporate accounts and records; corporate surplus and dividends; and corporate stocks and bonds. Departmental and branch accounting are carefully presented through exercises and laboratory problems.

Prerequisites: BUSINESS EDUCATION 201 and BUSINESS EDUCATION 202

Credit: 3 semester-hours

BUSINESS EDUCATION 303. *Stenography and Transcription, I*

The emphasis in this course is upon the transcription of shorthand notes into typed copy. Considerable attention is paid to sentence structure, correct grammar, spelling, and the development of good typewriting techniques. The dictation speed for new material increases as the course progresses.

Prerequisites: BUSINESS EDUCATION 205, BUSINESS EDUCATION 206, or college equivalent

Credit: 3 semester-hours

BUSINESS EDUCATION 305. *Business Law, I*

The purpose of this course is to acquaint the student with the laws relating to everyday business transactions. It includes such topics as: court systems, contracts, agency, employer-employee relationships, negotiable instruments, bailor and bailee, carriers, and shippers.

Credit: 3 semester-hours

BUSINESS EDUCATION 306. *Business Law, II*

This course is a continuation of BUSINESS EDUCATION 305. It covers sales, partnerships, property, deeds, mortgages, landlord and tenant, and torts.

Credit: 3 semester-hours

BUSINESS EDUCATION 308. *Economic Geography*

This course includes a study of the natural geographic areas of the world and the trade routes between these areas. Emphasis is given to the influence that natural environment has upon production, trade, and the utilization of important agricultural, forestry, mineral, and manufactured commodities.

Credit: 3 semester-hours

BUSINESS EDUCATION 407. *Office Practice—Secretarial*

The secretary must be acquainted with office procedure and must be able to operate many different office machines. This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied, with considerable attention being paid to filing. Understanding of office procedures and stenographic skill are strengthened through supervised office assignments and class work projects. Supervised work experience is a requirement of this course.

Credit: 3 semester-hours

BUSINESS EDUCATION 409. *Consumer Education*

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and the development of intelligent techniques for buying and using consumer goods and services.

Credit: 3 semester-hours

SENIOR YEAR**BUSINESS EDUCATION 302. *Accounting, IV (Methods)***

Manufacturing and cost accounting procedures are presented with complete analysis for the advanced student of accounting. Both the accounting for manufacturing operations as well as procedures in the preparation of the periodic summary for a manufacturing enterprise are considered. Job order and process cost accounting are studied in detail as well as the problems of budgets, and the analysis and interpretation of financial statements. The methods of teaching bookkeeping are included in this course.

Prerequisites: BUSINESS EDUCATION 201, BUSINESS EDUCATION 202,
BUSINESS EDUCATION 301

Credit: 4 semester-hours

BUSINESS EDUCATION 304. *Stenography and Transcription, II (Methods)*

Both transcription and stenographic skills are improved in this course. Short-hand theory is thoroughly reviewed and tested. Office-style dictation supplants

some of the conventionally timed dictation. The methods of teaching secretarial subjects are included in this course.

Prerequisites: BUSINESS EDUCATION 205, BUSINESS EDUCATION 206, and BUSINESS EDUCATION 301

Credit: 3 semester-hours

BUSINESS EDUCATION 401A. *Materials and Methods of Teaching General Business*

Consideration is given to the methodology of teaching the basic business subjects, including general business, business law, and consumer education. Content, lesson planning, visual aids, and evaluation procedures are considered for each subject. A test of subject-matter competency in each field is required.

Credit: 3 semester-hours

BUSINESS EDUCATION 405. *Office Practice—Clerical*

Office machines commonly used by the bookkeeper and clerical worker are studied in this course. Actual training is given on the 10-key and full keyboard adding listing machines, the rotary and key-driven calculating machines, and the posting machine. Other office skills necessary for the clerical worker to possess are stressed. Limited instruction is provided on the voice-writing and duplicating equipment.

Techniques of job analysis, including job description, job breakdown, and job evaluation are practiced. Supervised work experience is a requirement of this course.

Credit: 3 semester-hours

ELECTIVES

BUSINESS EDUCATION 401B. *Methods of Teaching Bookkeeping and Accounting*

A brief study is made of the history and development of bookkeeping instruction and materials, and aims and objectives in the light of current trends. Special attention is given to the problems of textbook selection, lesson planning, classroom and teaching procedures, tests and measurements, audio-visual and other teaching aids. Opportunities are given students to present lessons for criticism and evaluation. A test of subject-matter competency is required.

Prerequisite: 12 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 401C. *Methods of Teaching Secretarial Studies*

Techniques of teaching beginning stenography, advanced dictation and transcription, secretarial training, and clerical practice are provided in this course. Attention is given to the latest teaching materials, audio-visual aids, equipment, and supplies.

Teaching the skills of the clerical and secretarial worker is stressed; in addition, the traits, attitudes, work habits, and understandings which, if developed, permit an office worker to make a real contribution to the business world and to society are analyzed. The unique opportunities present in the preparation of the secretarial worker for service to the school and to the community are surveyed. A test of subject-matter competency in each field is required.

Credit: 2 semester-hours

BUSINESS EDUCATION 403. *Advanced Dictation and Transcription, II*

This course is designed for the teacher of stenography and transcription who wishes to study the problems of dictation and transcription from the viewpoint of his own class situation and also to improve his skill.

Those who take this course should have had a methods course in stenography and have had at least student-teaching experience.

Credit: 2 semester-hours

BUSINESS EDUCATION 404. *Business Economics*

This course deals with the business aspects of economics as related to immediate and long-range post-war problems; operation and government control of public utilities; taxation, government finance, and labor and management problems.

Credit: 2 semester-hours

BUSINESS EDUCATION 406. *Advertising, I*

This course aims to acquaint the student with the social and economic aspects of advertising so that a fair evaluation may be made of its worth as well as its undesirable aspects. Copy appeals, the writing of copy, advertising layouts, and the selection of appropriate types of media for various advertisements are considered. Emphasis is placed on the research aspects of the subject so important today.

Credit: 2 semester-hours

BUSINESS EDUCATION 410. *Advanced Accounting*

This is an advanced course for students who have had two years of accounting. Emphasis is placed on techniques of problem solving. Included are problems relating to basic accounting principles, cost accounting, and intermediate accounting. Considered are the determination of net income on accrual, cash and installment bases; problems of valuation, including problems of depreciation, depletion, and amortization; consignments; preparation and analysis of financial statements, including analysis of net change in gross profit and net change in working capital; partnership formation, operation, dissolution, and liquidation; bankruptcy, reorganization, and recapitalization, and consolidated balance sheets and income statements.

Prerequisites: BUSINESS EDUCATION 201, BUSINESS EDUCATION 202, BUSINESS EDUCATION 301, and BUSINESS EDUCATION 302

Credit: 3 semester-hours

BUSINESS EDUCATION 411. *Tax Accounting*

The purpose of this course is to give a comprehensive picture of the Federal Tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in the filing of individual tax returns are carefully studied. Opportunity is provided for the student to master the problems encountered in completing individual tax returns.

Prerequisite: 12 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 412. *Project Development in Consumer Education*

This course permits the student to explore in a specialized fashion two major areas of consumer education. Two projects are developed, one on housing and the other on the furnishing of a home. The basic purposes of this course are to illustrate the handling of material and the procedures that might be used in developing other consumer education units.

Prerequisite: An undergraduate course in consumer education or economics

Credit: 2 semester-hours

BUSINESS EDUCATION 414. *Merchandising, I*

This course analyzes the problems of how, what, where, and when to buy; the terms of purchasing, tested receiving and marketing procedures; the mathematics of merchandising—setting the retail price, planning mark-up and mark-down; and inventory controls. It is designed to assist the teacher of the prospective or actual small businessman.

Credit: 2 semester-hours

BUSINESS EDUCATION 417. *Marketing*

Marketing is the process of transferring goods from the producer to the consumer. The functions involved in the process, the various channels of distribution, marketing institutions, and the costs of marketing are considered in this course. Such topics as auctions, produce exchanges, wholesalers, retailing, department and mail-order stores, chain stores, cooperatives, profits and prices are included.

Credit: 2 semester-hours

BUSINESS EDUCATION 418. *Retail Store Management*

The work of the store manager in retail store operation is fully explored in this course. The problems of organization and management as they are encountered in various types of retail stores are discussed. Consideration is given to trends, principles, and practices in small and large stores in both the independent and chain-store fields.

Credit: 2 semester-hours

BUSINESS EDUCATION 420. *Field Studies in Business Education*

This orientation course aims to introduce business-education students, through direct observational techniques, to the realities of the business world. Six field trips are made in the New York Metropolitan Area which include visits to business organizations where the following types of business activity or relationships may be observed: production; merchandising and advertising; finance; transportation and communication; employer-employee relationships; government and business relationships. The field trips are supplemented by regular class sessions where discussions are held and visual aids presented to make the visits more meaningful.

Credit: 2 semester-hours

BUSINESS EDUCATION 421. *Finance and Investments for Families*

This course applies the principles of budgeting, banking, insurance, finance, and investments to the complicated problems facing individuals and families in these areas. It deals with budgets; savings; banking; life insurance; general insurance annuities; pensions; wills; such investments as stocks, bonds, and mutual funds; homes; and small business enterprises.

Credit: 2 semester-hours

THE DEPARTMENT OF ENGLISH

The English Department serves the entire college by offering certain courses in composition, and literature which are required of all students. It offers other courses which may be taken as electives by students who are preparing to teach in any field, and a four-year program for those students who choose the subject as a major field of specialization.

The four-year program offers a rich background of knowledge and literary experience to the student who wishes to teach English in the high school. Courses in speech and composition develop the student's ability to express himself orally and in writing. Other courses are designed to give the student understanding of the way human beings use language to express and communicate their ideas and experiences, of the types and forms of literature, of the major developments in the literary history of the Western world, of the many masterpieces of British and American literature, of the subtle and intimate relationship between literature and human culture, and of the ways by which expression and reading may develop and enrich the lives of high school students.

Training for leadership in extra-curricular programs of the secondary school is provided in the activities of organizations sponsored by the Department. The ENGLISH CLUB welcomes to membership all English majors regardless of special interests and abilities and serves as an integrating factor for students in the Department. ALDORNIA, the honor society of the Department, limits its membership to those English majors who excel in scholarship. The CREATIVE WRITING CLUB offers opportunities for writing and criticism to those students interested in composition as a creative art.

Three publications of the Student Government Association, THE MONTCLARION (the College Newspaper), THE MONTCLAIR QUARTERLY (a literary magazine), and LA CAMPANA (the college annual), are sponsored by the Department of English.

ENGLISH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Mus. 100 <i>Music Appreciation</i>	2
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i> ..	2	Sci. 100A <i>Physical Science</i> or	4
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100B <i>Biological Science</i>	3
Eng. 100A <i>World Literature, I</i>	3	Eng. 100B <i>World Literature, II</i>	3
Eng. 103 ENGLISH COMPOSITION	3	Eng. 102 DRAMA FROM THE MIRACLE PLAYS TO O'NEILL	3
	16½		15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i> ..	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i> ..	3	Ed. 202 <i>Human Dev. & Behavior, II</i> ..	3
Speech 100D <i>Fundamentals of Speech</i> ..	3	Electives	4
Electives	4	Eng. 203 THE LANGUAGE ARTS	2
Eng. 201 AMERICAN LITERATURE, I.	3	Eng. 202 AMERICAN LITERATURE, II ..	3
	16½		15½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i> ..	2	Math. 400 <i>Statistics</i>	2
H.Ed. 100 <i>Healthful Living</i>	2	Lang. 300 <i>Foundations of Language</i> ..	2
Electives	3	Electives	4
Eng. 301B SHAKESPEARE'S MAJOR PLAYS	3	Eng. 301A LITERATURE FOR ADOLESCENTS ..	2
Eng. 303 POETRY FROM CHAUCER TO FROST	3	Eng. 304 BRITISH & AMERICAN FICTION	3
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i> ..	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Mathematics</i> or <i>Science</i>	2	Ed. 4— <i>Education Elective</i>	3
Electives	4	Elective— <i>Humanities</i>	2
Eng. 401 TEACHING OF ENGLISH IN SECONDARY SCHOOLS	3	Elective	2
Eng. 402 SURVEY OF BRITISH LITERATURE TO 1798	3		
Eng. 419 GRAMMAR FOR TEACHERS ..	2		
	17		15

Total semester-hours—128

Note: 9 semester-hours of electives must be selected in a secondary teaching field other than the major.

Sixty observations divided between the junior and senior divisions of the College High School are required of senior English majors. These observations constitute partial fulfillment of the requirement to observe which is described in ENGLISH 401.

In addition to courses listed in this bulletin, there are courses at the graduate level which are offered in the Part-Time, Extension, and Summer Sessions. These courses are open to undergraduates who have completed student teaching. These courses are described in detail in the Graduate Bulletin.

THE ENGLISH MINOR

Requirements for the English minor are as follows:

	Semester-hours
ENGLISH 100G— <i>Western World Literature</i>	3
ENGLISH 201. <i>American Literature, I</i>	3
ENGLISH 202. <i>American Literature, II</i>	3
ENGLISH 303. <i>Poetry from Chaucer to Frost</i>	3
ENGLISH 304. <i>British and American Fiction</i>	3
ENGLISH 401. <i>The Teaching of English in Secondary Schools</i>	3
ENGLISH ELECTIVE	3
	<hr/> 21

THE FIRST YEAR

The English major begins his college study of English with a survey course in *World Literature* which gives him an over-view of the development of Western Culture and provides background for his reading and thinking on aesthetic, ethical, social, and political problems. He also takes a special course in *English Composition* and the course in *Drama from the Miracle Plays to O'Neill*.

General Education Courses

ENGLISH 100C. *Fundamentals of Writing*

For a description of this course, see page 52.

Credit: 3 semester-hours

ENGLISH 100G. *Western World Literature*

For a description of this course, see page 52.

Credit: 3 semester-hours

English Major Courses

ENGLISH 100A AND 100B. *World Literature: Its Forms and Its Masters*

The purpose of this course is to acquaint the student, by extensive reading and intensive discussion, with major works of world literature, as he reads from Oriental antiquity into the Twentieth Century. The student, thus, acquires a fundamental background for his subsequent courses which gives him a comprehensive perspective of the main current of the world's literary traditions. The work of

the first semester ranges from Oriental writings through the Graeco-Roman and Medieval periods to the Renaissance. The work of the second semester ranges from the Renaissance to approximately the present.

Credit: 3 semester-hours each

ENGLISH 103. *English Composition*

This course is designed to increase the student's skill in the art of thinking and to enable him to express his ideas clearly in written form. Regular practice in expository writing, stimulated by collateral reading and discussion, includes problems in diction, outlining, organization, and development. Deficiencies in mechanics and techniques are given individual attention. Note-taking and elementary research procedures precede the culminating activity of the course, the writing of a research paper.

Credit: 3 semester-hours

ENGLISH 102. *Drama from the Miracle Plays to O'Neill*

This course is concerned with the historical development of English drama from its beginning to the present day and analysis of the characteristics of drama as a literary form. Considerable emphasis is given to the contemporary drama.

Credit: 3 semester-hours

THE SECOND YEAR

ENGLISH 201. *American Literature, I*

Covering the period from the beginning to the Civil War, this course relates literary works to the political and social backgrounds from which they come, and traces American literature as a record of events and influences in the formation of a new nation in the western world.

Credit: 3 semester-hours

ENGLISH 202. *American Literature, II*

This course is a continuation of ENGLISH 201. ENGLISH 202 covers the period from the Civil War to the present day. Still concerned with the relation of literature to political and social backgrounds, the course gives added attention to aesthetic values and to the emergence of literature as an art.

Credit: 3 semester-hours

ENGLISH 203. *The Language Arts*

This course is designed to give the student a scientific understanding of the uses of language, to the end that he may learn to interpret more intelligently the meanings conveyed through human speech and writing—including prose, poetry, and propaganda—and may be better equipped to teach high-school students to write, read, speak, and listen more comprehendingly. The student's own practices in oral and written English furnish much of the clinical material of the course.

Credit: 2 semester-hours

THE THIRD YEAR**ENGLISH 301A. *Literature for Adolescents***

A study of the reading interests of different age levels introduces problems involved in the selection of literature for students from the fifth through the twelfth grades. Reading and analysis of literature for children as well as for the young adolescent are required.

Credit: 2 semester-hours

ENGLISH 301B. *Shakespeare's Major Plays*

The plays of Shakespeare which are most frequently taught in the high school are studied. Discussion of Shakespeare's conception of tragedy and comedy, his dramatic art, the sources of his plays, staging in Shakespeare's theatre and in our own, and typical textual problems, provides the student with a background for teaching Shakespeare in the secondary school.

Credit: 3 semester-hours

ENGLISH 303. *Poetry from Chaucer to Frost*

This course surveys the development of English poetry from its beginnings to the present time. Its study includes the types of poetic statement, the historical development of the styles and forms of English poetry, the life and work of the major British and American poets, and the critical appreciation of poetry as an art and as an expression of life.

Credit: 3 semester-hours

ENGLISH 304. *British and American Fiction*

This course is designed primarily to acquaint the student with the great novels of English and American literature from Defoe to Hemingway. A second major objective is to guide future teachers in the selection and treatment of novels suitable to high-school students of varying age levels and social backgrounds.

Credit: 3 semester-hours

ELECTIVE**ENGLISH 310. *Journalism***

This course is designed to qualify the student to teach high-school journalism. Its aim is to give the student training in recognizing news; gathering it; and preparing it for print, including copyreading, headline writing, proofreading, and page make-up. The course assumes little or no previous journalistic training.

Credit: 2 semester-hours

THE FOURTH YEAR

In its major purposes the fourth year looks forward to the student-teaching experience. The Department offers a detailed, chronological *Survey of British Literature* which demands intense and precise scholarship.

The Teaching of English implements the professional study which has been stressed continuously throughout the student's college career. By discussion, by daily observations, and by participation in the College High School, the meaning of those professional ideas and ideals that have been urged is demonstrated.

ENGLISH 401. *The Teaching of English in Secondary Schools*

Students are taught to develop and use materials of the classroom; lesson plans and units of work are prepared and presented for criticism; textbooks are analyzed for training in their use; and bulletin board exhibits and visual education materials are prepared by students for the class. Observation and criticism of teaching in the College High School, and criticism of student compositions are required.

Credit: 3 semester-hours

ENGLISH 401X. *The Teaching of English in Secondary Schools*

Students are taught to develop and use materials of the classroom; lesson plans and units of work are prepared and presented for criticism; textbooks are analyzed for training in their use; and bulletin board exhibits and visual education materials are prepared by students for the class. This course is offered during summer sessions and as a Part-Time-Extension offering for certification credit.

Credit: 2 semester-hours

ENGLISH 402. *Survey of British Literature to 1798*

This course draws together into a systematic narrative the story of the development of English literature from the beginnings to the romantic triumph in 1798.

Credit: 3 semester-hours

ENGLISH 419. *Grammar for Teachers*

This course is a study of the basic facts of grammatical relationships in English, and of the current problems of "rules" as opposed to "usage." The primary aim of the course is to acquaint students with the true functions of grammar in speech and writing.

Credit: 2 semester-hours

ELECTIVES

ENGLISH 404. *Survey of British Literature*

This course is a continuation of English 402. It takes up the story with the romantic triumph in 1798 and continues it to the present time.

Credit: 2 semester-hours

ENGLISH 406. *The Modern Novel*

Emphasis is given to British and American novels since 1870, and the important tendencies of present-day prose fiction are explored. Students are taught how to read a novel with profit, and how to guide and direct the reading of others.

Credit: 2 semester-hours

ENGLISH 407. *British and American Biography*

Both the old and new types of biography are read and studied in this course, with emphasis upon the Nineteenth and Twentieth Centuries. Biography is presented for its cultural and informational value, for its use in integrating the work of the various departments in the high school, and for its direct help in the vocational guidance program.

Credit: 2 semester-hours

ENGLISH 408. *Creative Writing*

Students in this course attempt seriously the standard literary forms in prose and verse. Each student is assisted in finding his own best field of writing, and is given further training in that field. The course is based entirely upon the needs of the class as revealed in student-written manuscripts. Much time is devoted to criticism and to discussion of mutual problems. Wherever possible, the course is made to reflect methods of creative teaching in the field of composition.

Credit: 2 semester-hours

ENGLISH 413. *Modern Poetry*

This course deals with the work of contemporary poets, both British and American. Much of the best modern poetry is studied for interpretation and appreciation. The distinctive poetry "movements" that have occurred during the present century are examined as expressions of changing social and artistic ideals. Critical appreciation of poetry is developed through comparison of the diverse styles, themes, and poetic theories present in modern poetry.

Credit: 2 semester-hours

ENGLISH 420. *High School Classics*

This course is a seminar for prospective student teachers on the problems of teaching literature in high schools. The student reads numerous articles on the "classics" vs. "moderns" controversy, becomes thoroughly acquainted with the contents and aims of the best high school anthologies currently in use, and builds up a working philosophy for his own teaching. Through the continual practice of reporting and discussion leading, the student is enabled to integrate his total experience in college.

Credit: 2 semester-hours

ENGLISH 421. *The Short Story*

The course traces the history of the short story as an evolving literary form, emphasizing the productions of the Nineteenth and Twentieth Centuries. Many stories are analyzed for both human and literary values. Professional use of the short story is the guiding purpose in the conduct of the course.

Credit: 2 semester-hours

ENGLISH 428. *The Film and Society*

This course considers the impact of the motion picture on our culture. The film is studied and evaluated as a powerful social and educative force, as an art form, and as an entertainment medium. The origin and development of film techniques are treated, and films are shown at each session, accompanied by analysis and discussion. The scenario as a literary type and the adaptation of prose fiction for film purposes are included in the course content.

Credit: 2 semester-hours

ENGLISH 430. *Reading in Secondary Schools*

After examination of recent research concerning reading activities at various age levels, the class undertakes to evaluate methods devised to develop reading skills, to increase vocabularies, and to improve the comprehension of secondary-school students.

Credit: 2 semester-hours

ENGLISH 432. *The Development of the Drama*

The development of the drama is studied in all periods from ancient Greece and Rome through the Middle Ages and the Renaissance to the beginning of modern drama with Ibsen. The emphasis of the course is placed on the major characteristics of the drama and its necessary complement, the theatre. Representative plays are read and discussed.

Credit: 2 semester-hours

ENGLISH 443. *Modern Drama*

An historical survey of trends, dramatists, plays, and accomplishments from Ibsen to the latest prize plays on Broadway provides background for this course. An examination of the structure and content of plays to determine what constitutes a good play stimulates appreciation. Students are encouraged to read widely and to see current productions on Broadway.

Credit: 2 semester-hours

ENGLISH 446. *The One-Act Play*

This course studies the one-act play as an art form, devoting special attention to plays which are suitable for high school production.

Credit: 2 semester-hours

ENGLISH 451. *Literature and Art in Western Culture*

This course deals with the nature of literature and considers its importance as a factor in the development of international understanding. It deals with the relation between the use of language in literature and with the methods of art since the re-creation of experience is a function common to both. Through reading the literature which is being read by our neighbors today, both in Europe and in the Western Hemisphere, students are able to participate in a common experience with them.

Credit: 2 semester-hours

ENGLISH 452. *Five Great Books*

The aim of this course is to broaden and to deepen the student's general cultural perspective by a study of five books which have profoundly influenced present civilization. The actual choice of texts is a cooperative class enterprise. Selections are made from such books as: *The Bible*, Homer's *Odyssey*, Plato's *Republic*, Shakespeare's *Hamlet*, Rousseau's *Confessions*, Goethe's *Faust*, Tolstoy's *War and Peace*, Dewey's *The School and Society*. This course is designed to provide leadership in local "Great Books" meetings.

Credit: 2 semester-hours

ENGLISH 459. *A Survey of Great Chinese Literature*

Some of the contributions which have gone into the making of Chinese literature, such as the *Book of Odes* of Confucius, the poems of Li Po and Tu Fu, the Lute Song, and the *Dream of the Red Chamber*, are considered in this course. Aside from a general survey of the great literature of China, special attention is given to English translations of the masterpieces of Chinese literature. There are twenty-four hours of lectures in the morning; after lunch each day a period of forty-five minutes is devoted to informal talks, story-telling, singing of Chinese songs, and showing of motion pictures. During the workshop period individual students work on specific topics under the guidance of the instructor.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

THE DEPARTMENT OF FINE ARTS

Students who complete the fine arts curriculum are certified to teach in the elementary schools, junior high schools, and senior high schools of New Jersey.

During the first two years the students explore design in a variety of media and the art forms of painting, ceramics, theater, and puppetry.

In the third year the students study art and civilization, textiles, the foundations of art education, and the arts of commerce and industry.

The work of the fourth year includes the making of prints and a study of the art curriculum of the elementary and secondary schools.

Sculpture, philosophy of art, metalwork, home design and community planning, drafting and woodwork, costume design, and life drawing are offered as electives. Drawing is required throughout the four years.

FINE ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i> ...	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i> ...	½
Soc. St. 100A <i>Dev. of World Civilization, I</i>	3	Soc. St. 100B <i>Dev. of World Civilization, II</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
Sci. 100A <i>Physical Science</i> or	4	Mus. 100 <i>Music Appreciation</i>	2
Science 100B <i>Biological Science</i>		Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2
F.A. 101A <i>DESIGN IN MATERIALS, I</i>	3	F.A. 101B <i>DESIGN IN MATERIALS, II</i>	3
F.A. 102A <i>CERAMICS: POTTERY & SCULPTURE, I</i>	3	F.A. 102B <i>CERAMICS: POTTERY & SCULPTURE, II</i>	3
F.A. 405A <i>DRAWING, I</i>	0	F.A. 405B <i>DRAWING, II</i>	0
	16½		16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life, I</i>	3	Soc. St. 200B <i>Contemporary American Life, II</i>	3
Ed. 201 <i>Human Development & Behavior, I</i>	3	Ed. 202 <i>Human Development & Behavior, II</i>	3
Sci. 100C <i>The Earth Sciences</i>	2	H.Ed. 100 <i>Healthful Living</i>	2
Elective	2	Lang. 300 <i>Foundations of Language</i>	2
F.A. 200A <i>THEATER ARTS, I</i>	2	Elective	2
F.A. 202A <i>PAINTING, I</i>	3	F.A. 200B <i>THEATER ARTS, II</i>	2
F.A. 405C <i>DRAWING, III</i>	0	F.A. 202B <i>PAINTING, II</i>	3
	15½	F.A. 405D <i>DRAWING, IV</i>	0
			17½

JUNIOR YEAR

Ed. 303 <i>The Teacher in School & Community</i>	3	Ed. 304X <i>Principles & Methods of Tchg.</i>	3
Electives	4	Ed. 403A <i>Student Teaching—Junior Practicum (4 weeks off campus)</i>	3
F.A. 201A <i>TEXTILES, I</i>	2	F.A. 201B <i>TEXTILES, II</i>	2
F.A. 300A <i>ART & CIVILIZATION, I</i> ..	3	Math. 300 <i>Social Uses of Mathematics</i>	2
F.A. 301A <i>ART IN COMMERCE & INDUSTRY, I</i>	2	F.A. 300B <i>ART & CIVILIZATION, II</i> ..	3
F.A. 302 <i>FOUNDATIONS OF ART EDUCATION</i>	2	F.A. 301B <i>ART IN COMMERCE AND INDUSTRY, II</i>	2
F.A. 405E <i>DRAWING, V</i>	0	F.A. 405F <i>DRAWING, VI</i>	0
	16		15

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 4— <i>Education Elective</i>	3
Ed. 403B <i>Student Teaching (6 weeks off campus)</i>	5	Elective— <i>Mathematics or Science</i>	2
Eng. 100G <i>Western World Literature</i>	3	Elective— <i>Humanities</i>	2
Math. 400 <i>Educational Statistics</i>	2	Electives	4
F.A. 403A <i>PRINT MAKING, I</i>	2	F.A. 403B <i>PRINT MAKING, II</i>	2
F.A. 405G <i>DRAWING, VII</i>	1	F.A. 401 <i>ART CURRICULUM OF ELEMENTARY & SECONDARY SCHOOLS</i> ..	2
	16		15

FRESHMAN YEAR**General Education Course****FINE ARTS 100.** *Introduction to the Visual Arts*

For a description of this course, see page 52.

Credit: 3 semester-hours

Fine Arts Major Courses**FINE ARTS 101A AND 101B.** *Design in Materials*

This course is an initial exploration of the elements of design and their organization into art forms. The relationship of materials, tools, and processes in terms of the function of each art form is learned through personal exploration in a wide variety of media. The integral nature of the arts and the culture is given major emphasis throughout the course. The reading content is based upon a study of contemporary art forms.

Credit: 3 semester-hours each

FINE ARTS 102A AND 102B. *Ceramics: Pottery and Sculpture*

This course in ceramics includes the making of pottery and ceramic sculpture by coil, slab, throwing, and casting as well as primitive techniques. All methods of decorating are explored, including slip, agraftito, underglaze, and glaze. The making of glazes and experiments in glaze formulas are carried out. Stacking and firing the kiln are a part of each student's experience.

The course content includes a study of the world's great ceramic period through reading and museum trips.

Credit: 3 semester-hours each

FINE ARTS 405A, 405B, 405C, 405D, 405E, 405F, and 405G. *Drawing I, II, III, IV, V, VI, VII*

This course is given under the guidance of members of the art faculty during the four-year undergraduate program. Regular assignments and critiques are designed to develop visual perception and its organization into pictorial form. Media include pencil, charcoal, sanguine, conte, lithograph, crayon, ink, wash, scratch board, pastels, and mixed media.

A portfolio of drawings is submitted at the end of the first semester of the senior year, and the grade for all parts of the course is given at that time.

Credit: 1 semester-hour

Fine Arts Elective Course for Home Economics Majors**FINE ARTS 110.** *Introduction to Design in Materials*

The elements of design and their organization into the art forms of ceramic, textiles, furniture, and other articles of home use are covered in this course. The relationship of materials, tools, and processes in terms of the function of each a

form is learned through studio experiences. The reading content is based upon a study of the work of contemporary designers in the field of home furnishings.

Credit: 2 semester-hours

SOPHOMORE YEAR

FINE ARTS 200A & 200B. *Theater Arts*

A major goal of this course is the development of techniques of group planning for the solution of an art problem and the awareness of individual responsibility for group achievement. Experiences are in the production of puppet and marionette shows and the preparation of scenery and lighting for live productions. Study and experimentation in these areas and in the allied fields of dance, filming, and television are made through reading, trips, and interviews.

Credit: 2 semester-hours each

FINE ARTS 202A & 202B. *Painting*

This course includes experiences in many media and forms of painting. The student is encouraged to experiment with emphasis on personal vision and modes of expression. The use of design is directed toward the formulation of a competent individual statement in a limited number of media. The development of painting, beginning with the impressionist movement and including contemporary directions, constitutes the major reading content of the course. Frequent visits to galleries and museums are required.

Credit: 3 semester-hours each

JUNIOR YEAR

FINE ARTS 201A & 201B. *Textiles*

This course is concerned with the designing of textiles through the processes of weaving and decorating. Textiles are woven on simple handmade looms, and on professional floor and table looms, with consideration given to types of loom experiences suitable for children of different ages. Textiles are decorated by tie and dye, block print, batik, stencil, painting, and needlework, applique, and rug hooking. Historic and contemporary fabrics and their design and uses in various cultures are studied through readings and visits to museums, shops, and galleries.

Credit: 2 semester-hours each

FINE ARTS 300A & 300B. *Art and Civilization*

A study is made of historic periods in which art most clearly reflects the culture. The impact on art of geographic conditions and social, economic, and religious forces is studied. Present art forms are understood by a study of their historic roots. The course serves to integrate the student's historic art information and to develop his critical and evaluative abilities. Museum visits and extensive reading are required.

Credit: 3 semester-hours each

FINE ARTS 301A & 301 B. *Art in Commerce and Industry*

Lettering, layout, display, and educational exhibition techniques are developed in the workshop. College activities when appropriate supply the content of the technical problems. The relationship of hand art to machine art is considered, and the role of the artist-industrial designer in a technological age is studied to discover his contribution to a culturally healthy environment. Readings include philosophic writings of Morris, Mumford, and others and current national and foreign periodicals of industrial design. Trips to laboratories and studios are taken.

Credit: 2 semester-hours each

FINE ARTS 302. *Foundations of Art Education*

The content of this course includes a study of research findings of the pattern of child development in plastic and graphic media; the organization and presentation of art experience to the children of grades one through twelve; and the relationship of art to other areas of the curriculum; and the role of the arts in the extra-curricular program within the school and the community. Practical aspects of teaching art including materials and tools, and their source, cost, care, and organization are studied.

Credit: 2 semester-hours

SENIOR YEARFINE ARTS 401. *Art Curriculum of Elementary and Secondary Schools*

This course is planned to give the student an opportunity to organize his learnings into a tentative curriculum of art and to test his thinking in relation to the best curriculum guides in current use.

Credit: 2 semester-hours

FINE ARTS 403A & 403B. *Print Making, I and II*

The many ways of making prints: etching, dry point, wood cuts and wood engraving, lithography, silk screen, photograms, and photography are learned in personal production which emphasizes the relation of material, tool, and process. Adaptation of these professional media to classroom use is one aspect of this course. The work of masters in these various types of print making are studied in reproductions and in museum trips.

Credit: 2 semester-hours each

Fine Arts ElectivesFINE ARTS 400. *Philosophy of Art*

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education.

Credit: 2 semester-hours

FINE ARTS 406. *Art Workshop*

The workshop is designed to allow the student to have a concentrated experience in art forms of his choice. Each student projects his own problem in consultation with, and under the direction of, a faculty member.

Credit: 4 semester-hours

FINE ARTS 415. *Designing in Native Materials*

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangement for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes becomes an exciting adventure.

Credit: 2 semester-hours

FINE ARTS 420A & 420B. *Sculpture General: I and II*

This course provides the student with studio experiences in three dimensional expression. A variety of materials are explored including clay, plaster, metal, plastics, stone, and wood. Sculptural methods such as modeling, direct carving, construction, and casting are experienced. Special emphasis is placed on those materials and methods most applicable to the public school teaching program. In addition to the studio problems the student is required to complete text assignments and outside reading problems, make frequent museum and gallery visits, prepare written and oral reports on readings and visits, and spend additional time in designing.

Credit: 2 semester-hours each

FINE ARTS 425. *Metalwork General: I and II*

This course introduces the student to the metals traditionally used in the shaping of useful articles and to the influence of both materials and construction on methods of design. It treats the relationships of structural and surface design as well as the techniques for developing both. It explores the role of the designer-craftsman in a technological society, the relationships of hand and machine arts, and the influence of the handicrafts on the development of taste. Research in these areas includes trips, reading, and discussion.

Credit: 2 semester-hours each

FINE ARTS 430. *Drafting and Woodwork*

This course is designed as an introduction to the basic processes in designing in wood with the use of hand and power tools. Drafting the designed pieces is integrated with the total designing process and includes the use of drawing instruments and the making of working drawings.

Credit: 2 semester-hours

FINE ARTS 435. *Costume Design*

A study of the elements of art as they determine the designing of the costume is the content of this course. Draping and construction in materials are the design approaches used to show the necessity of designing the costume in terms of the individual.

Credit: 2 semester-hours

FINE ARTS 440A & 440B. *Home Design and Community Planning*, I and II

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science, and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishings, model homes, well-planned communities are included in the course activities.

Credit: 2 semester-hours each

FINE ARTS 445. *Life Drawing*

This is a course in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

Credit: 2 semester-hours

FINE ARTS 450. *Print Making I—Silk Screen Printing*

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master designs through the construction of necessary printing facilities and printing. Experiences include the use of tusche, glue, stencil lacquer, and photographic techniques.

Credit: 2 semester-hours

FINE ARTS 460A & 460B. *Photography: A Contemporary Art Form*, I and II

The content of the course is predominantly creative, using the technical materials as a medium of expression and experimentation. The work of leading contemporary artists using photography as an art medium is studied.

Credit: 2 semester-hours each

FINE ARTS 474A & 474B. *Arts and Crafts in Education*, I and II

Included in this course are workshop activities in the arts and crafts of the elementary and secondary school program. Painting, drawing, modeling, pottery, weaving, papier-mache, paper sculpture, school display techniques and lettering, wood, leather, plastics, metal work, and puppetry are materials and processes which are explored.

Credit: 2 semester-hours each

Fine Arts Elective Courses in the Humanities**FINE ARTS 402. *Modern Philosophies of Art***

The work of the major writers in art in the Nineteenth and Twentieth Centuries is examined in this course. Exploration is made in the nature of the creative experience, the function of art in the life of the individual and of society, the nature of the creative process, the rise of new materials, and institutions and sentiments affecting current thinking in the field. Discussions are based on readings of philosophers, poets, social scientists, psychologists, and artists.

Credit: 3 semester-hours

FINE ARTS 408A AND 408B. *Painting Laboratory, I and II*

This course gives the student an opportunity to use the materials of the painter for personal creative experience. Through the use of oils, water colors, and other media, the student is encouraged to work on landscape, figure, and free imaginative composition. Emphasis is placed on individuality of expression, variety of subject matter, and experimentation. No previous art experience is necessary.

Credit: 2 semester-hours each

FINE ARTS 416. *Chinese Art*

This is an introductory course on Chinese art in its various aspects: its historical development; aesthetic principles; and various forms such as calligraphy, painting, sculpture, bronze and jade, pottery and porcelain, architecture, etc. Topics include the philosophical basis of Chinese art, nature in Chinese art, symbolism in Chinese art. Each lecture is illustrated by photographs and lantern slides as well as demonstrations. Students have an opportunity to learn the elements of Chinese painting from widely recognized Chinese artists.

Credit: 3 semester-hours

FINE ARTS 421A & 421B. *Sculpture Laboratory, I and II*

This course provides the student with experiences in a variety of materials. It is designed for non-art majors who are interested in sculpture and who wish to explore their ability to express themselves in three-dimensional forms. The student can experiment with clay, plaster, metal, plastics, stone, and wood. Modeling, direct carving, construction, and casting are experienced. To extend the experience of sculpture beyond the classroom, films on sculpture are used, and museum visits are encouraged.

Credit: 2 semester-hours each

FINE ARTS 426A & 426B. *Art Metalwork Laboratory, I and II*

This course introduces the student to the art forms of jewelry, hollow ware, and enameling, and treats the influences of both materials and methods of construction and design. This course is designed for non-art majors who wish to develop some competency in metalwork.

Credit: 2 semester-hours each

FINE ARTS 436A & 436B. *Design Laboratory*, I and II

This course is designed for non-art majors who wish to continue experiences introduced in FINE ARTS 100. After an initial exploration of the art forms of painting, sculpture, print making, ceramics, jewelry, and textiles, each student chooses problems which he wishes to explore in greater depth. The relationship of tools, materials, and processes in terms of the function of each art form is learned through work in the media of his choice.

Credit: 2 semester-hours each

FINE ARTS 441A & 441B. *Home Design Laboratory*, I and II

The major experience of this course is the design of a home, considering real needs and limitations such as orientation to sun, air currents, vistas, relation to community, plot plan, projected family size, interests, and budget. The use of modern methods and materials in both house and furnishings is studied in the work of contemporary architects and designers.

Credit: 2 semester-hours each

FINE ARTS 461A AND 461B. *Photography Laboratory*, I and II

This course provides for the creative development of the individual in photography, through personal experiences, trips, films, discussion, lectures, criticisms, and demonstrations. Areas for exploration include documentary realism, romanticism, action photography, portraiture, and nature photography. Essentials of the photographic processes including developing, enlarging, and exhibiting are covered.

Credit: 2 semester-hours each

FINE ARTS 475A & 475B. *Theater Arts Laboratory*, I and II

The purpose of this course is to develop an increased interest and appreciation of the theater arts. Study in the allied areas of opera, musical comedy, and the dance, as well as the communication arts of the cinema and television, is made through trips, reading, and interviews. Special emphasis is given to the growing importance of the community theater. Construction of models is used to increase appreciation of contemporary stage and set designs. Outstanding designers are studied. Lighting demonstrations are arranged with cooperation of the Speech Department. Participation in campus theater experiences is encouraged.

Credit: 2 semester-hours each

FINE ARTS 480A & 480B. *Textiles Laboratory*, I and II

This course is designed for non-art majors who have an interest in developing their self-expression through creative experiences in the textile arts. Experiences may be selected from work in simple handmade looms and table and floor looms, and the decorating processes of dyeing, printing, needlework, applique, or rug hooking.

Credit: 2 semester-hours each

FINE ARTS 490. *Art of the Nineteenth Century*

This course explores the major art movements of the Nineteenth Century in terms of the rapid changes of social, political, and artistic institutions and ideas and interests of the leading artist personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and Post-Impressionists are discussed as well. The work of this period is studied through illustrated lectures, museum trips, readings, and discussion. The course is planned for both non-art and art majors.

Credit: 2 semester-hours

FINE ARTS 491. *Art of the Twentieth Century*

This is a course designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion and studio participation, the major influences and trends in the development of painting, sculpture, and architecture of the Twentieth Century. It is planned for students who wish to enlarge their general education in art.

Credit: 3 semester-hours

FINE ARTS 492A & 492B. *Selected Problems in Art History, I and II*

This is a seminar course dealing with selected art problems of historic, social, and philosophical nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art, the rise of landscape painting, Impressionism in the East and West, historical views of art criticism, the self portrait, Romanticism and Realism, art and society, the art market, the relation of painting and poetry, impact of Primitive Art on Modern Art, art and the sciences, and the rise of "Isms." Methods for dealing with selected topics include lectures, readings, reports, and discussion.

Credit: 2 semester-hours each

FINE ARTS 493. *Masterpieces of World Art*

Designed for non-art majors this is an introductory course to the major art periods, movements, and works of art throughout the ages. Selected works of art from prehistoric periods, the ancient world, the Middle Ages, the Renaissance, the East, and the modern period, are studied in reference to their historical settings, the interests and ideals of their surrounding cultures, and the personality of the artist. Persistent and changing features and trends of great works of art and significant art movements are explored. The major works of art are studied through illustrated lectures, museum and gallery trips, readings, and discussions.

Credit: 3 semester-hours

THE DEPARTMENT OF FOREIGN LANGUAGES

The Foreign Language Department aims to train teachers for the junior and senior high schools in sound scholarship, true culture, and sympathetic under-

standing of the foreign people whose language they are to teach. The Department is also offering courses preparing students for the teaching of foreign languages in the elementary school.

All the courses in the Department of Foreign Languages are planned to provide linguistic skill, literary appreciation, and understanding of human relationships in order to insure efficient professional service. The emphasis is on sequential development which has the effect of unifying the work within the Foreign Language Department and of correlating it with English, social studies, education, art, and music.

Students majoring in a foreign language are required to take work in that language for the four years of the college course. In these four years the prospective teacher of French, Spanish, or Latin acquires a fundamental knowledge of his major subject and an understanding of world problems.

For majors in a chosen language the following courses are required: 101, 102, 201, 202, 301, 302, 401, 402, and 404.

For minors in a foreign language the following courses are required: 101, 102, 201, 202, 401, and 402. Students who begin a modern language in college may obtain credit for the intermediate courses in a beginning language in lieu of one semester of the appropriate language in the minor curriculum.

Prerequisite for those majoring or minoring in any foreign language are three or four years of high school work in the language. Consideration will be given to excellent students who have not fully met this requirement. High school Latin is desirable for all language work, but it is not prerequisite for the study of a modern language at the College. The class work in French, German, Russian, and Spanish is conducted entirely in these languages.

The Foreign Language Department sponsors three language clubs. In these extracurricular activities prospective language teachers have ample opportunity for leadership, creative work, and worthy employment of leisure time.

The College High School plays an important part in the daily life of students of the Foreign Language Department. Observations and active participation through limited assistantship and occasional demonstration are made during the junior and senior years. Thus, the subject-matter of high school and college language classes is thoroughly integrated.

An attractive feature of the foreign language work preparatory to high-school teaching is the possibility of a year of study in a foreign country, a feature which this College stresses in its training of teachers of modern languages.

Students desiring academic credit for STUDY ABROAD register for the work before taking it. All such matters as the country and institution in which the work is to be done, the amount of credit to be received, reports to be made, and the like, are prearranged with the chairman of the department. For further information about this work, see page 38.

In the last thirty years, one hundred and ninety-one students from the College have spent a year of study in colleges and universities of Austria, France, Germany, Canada, Mexico, Spain, Switzerland, and South America.

BEGINNING LANGUAGES**FRENCH 100A AND 100B. *Beginning French***

These courses are designed for students who desire to start French in college. Special emphasis is placed on training the student to understand, speak, read, and write the foreign language. The foreign tongue is used almost exclusively in teaching the courses. Materials used introduce the student to French life and civilization. Laboratory work is included as part of the requirements for the courses.

Credit: 3 semester-hours each

FRENCH 200A AND 200B. *Intermediate French*

These courses which form a continuation of FRENCH 100A and 100B are also open to students who wish to minor in French but who lack the language proficiency necessary for FRENCH 101 and 102, courses designed for majors and selected minors. FRENCH 200A and 200B are conducted entirely in French. They provide a good knowledge of applied French grammar, the opportunity to develop the ability to read fluently with a good pronunciation and intonation, and practice in writing simple French compositions. They introduce the students to French literature from the medieval period to today. Laboratory work is included as part of the requirements for the courses.

Credit: 3 semester-hours each

GERMAN 100A AND 100B. *Beginning German*

These courses are designed for students without previous instruction in German. The approach is oral-aural, and students are taught to understand and to use simple idiomatic German. Since these courses are designed primarily for students needing the language as a tool, emphasis is placed on the ability to read German with a concomitant mastery of the principles of German word formation and of typically involved sentence structure. Classes are conducted in German. Laboratory work is included as part of the requirements for the courses.

Credit: 3 semester-hours each

GERMAN 200A AND 200B. *Intermediate German*

These courses are a continuation of GERMAN 100A and 100B, and are open to those who have successfully completed GERMAN 100A and 100B or the equivalent. In GERMAN 200A and 200B the reading material becomes increasingly more difficult with assignments being made in accordance with student needs and interests. GERMAN 200A and 200B should prepare students who wish to pursue graduate work to read scholarly literature in their respective fields. Laboratory work is included as part of the requirements for the courses.

Credit: 3 semester-hours each

RUSSIAN 100A AND 100B. *Beginning Russian*

Designed for those with no previous knowledge of Russian, these courses stress a thorough exposition of oral and written Russian. The reading of selected texts and conversation practice are included. Laboratory work is included as part of the requirements for the courses.

Credit: 3 semester-hours each

RUSSIAN 200A AND 200B. *Intermediate Russian*

These courses form a continuation of RUSSIAN 100A and 100B, and are open to those who have successfully completed RUSSIAN 100A and 100B or the equivalent. After a detailed grammatical review the main emphasis falls on translations from Russian literary classics of the nineteenth and twentieth centuries and on conversational practice. These courses meet for three class hours and two laboratory hours weekly for two semesters.

Credit: 3 semester-hours each

RUSSIAN 300A AND 300B. *Advanced Russian*

This course is a continuation of RUSSIAN 200A and 200B, and is open to those who have successfully completed RUSSIAN 200A and 200B or the equivalent. The course work in RUSSIAN 300A and 300B consists of extensive outside reading and translation of Russian literary classics from Pushkin to Sholokhov. Periodical literature of a type appropriate to special interests of individual students may also be used. Prepared classroom speeches and discussion of these materials are conducted in Russian. There is particular stress on conversational Russian. This course meets for three class hours and two laboratory hours weekly for two semesters.

Credit: 3 semester-hours each

SPANISH 100A AND 100B. *Beginning Spanish*

These courses are designed for students who desire to start Spanish in college. Special emphasis is placed on the training of the student to understand, speak, read, and write the foreign language. Spanish is used almost exclusively in the teaching of the courses. Students are introduced to Spanish life and civilization through the materials used in the course. Laboratory work is included as part of the requirements for the courses.

Credit: 3 semester-hours each

SPANISH 200A AND 200B. *Intermediate Spanish*

These courses which form a continuation of SPANISH 100A and 100B are also open to students who wish to minor in Spanish but who lack the language proficiency necessary for SPANISH 101 and 102, courses designed for majors and selected minors. SPANISH 200A and 200B provide a thorough review of language skills and constant practice in using the written and spoken language. Reading

and discussion of representative authors in various periods and literary schools of the Spanish-speaking countries are provided. Laboratory work is included as part of the requirements for the courses.

Credit: 3 semester-hours each

FRENCH

The following courses are arranged to give the prospective high school teacher of French an understanding of the French people, their culture, and their problems through a study of the development of their civilization—their social, economic, political, literary, and artistic life. All courses are given entirely in French, and are designed to give ever-increasing opportunities to develop self-expression in the foreign tongue through readings, discussions, and reports.

FRENCH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A/Physical Science or	4	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Sci. 100B <i>Biological Science</i>		Sci. 100C <i>The Earth Sciences</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	FR. 102 <i>FRENCH CIVILIZATION: ORIGINS TO 1610</i>	4
FR. 101 <i>FRENCH CIVILIZATION: CONTEMPORARY FRANCE</i>	4		15½
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i> ..	3	Ed. 202 <i>Human Dev. & Behavior II</i>	3
Mus. 100 <i>Music Appreciation</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
FR. 201 <i>SEVENTEENTH CENTURY FRENCH PROSE & POETRY</i>	4	FR. 202 <i>CORNEILLE, MOLIÈRE, RACINE</i>	4
	16½		16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i> ..	2	Eng. 100G <i>Western World Literature</i> ..	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
FR. 301 <i>FRENCH CIVILIZATION: EIGHTEENTH CENTURY</i>	4	FR. 302 <i>DEVELOPMENT OF THE FRENCH NOVEL TO 1890</i>	4
	16		16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science	2	Ed. 4— <i>Education Elective</i>	3
Electives	4	Elective—Humanities	2
LANG. 401 TEACHING OF MODERN LANGUAGES IN SECONDARY SCHOOL	3	FR. 404 SURVEY OF FRENCH POETRY ..	2
FR. 402 FRENCH GRAMMAR FOR TEACHERS	4		<hr/> 15
	<hr/> 16		

Total semester-hours—128

Note: 9 semester-hours of electives must be selected in a secondary teaching field other than the major.

THE FIRST YEAR

French Civilization

FRENCH 101. *French Civilization: Contemporary France*

This course aims to give the students an understanding of France today through a study of the various aspects of her material, intellectual, artistic, and spiritual life. The topic of each section is introduced by a short factual essay in French with the double purpose of providing a study of vocabulary and acquiring information on the subject-matter. The course is taught in French and is conducted by means of reading, questions, and class discussion. Weekly written compositions based on the study of the week are required. Oral reports are given before the class by the students on a topic of their choice taken from the subject-matter of the course. The course is open to French majors and selected minors. Laboratory work is included as part of the requirements of the course.

Credit: 4 semester-hours

FRENCH 102. *French Civilization: Origins to 1610*

After having studied the various aspects of France today, this course is designed to acquaint the student with the background from which contemporary France has emerged. A study is made of French history from its origin and of the cultural development of France—social, intellectual, artistic, and spiritual—through the Middle Ages and the Renaissance. The course is open to French majors and selected minors. Laboratory work is included as part of the requirements of the course.

Credit: 4 semester-hours

THE SECOND YEAR

Seventeenth Century French Literature

FRENCH 201. *Seventeenth Century French Prose and Poetry*

In the sophomore year the student is introduced to the literature and life of the seventeenth century, an age of important French contributions to the world's literature. Special attention is given to great prose writers: La Rochefoucauld,

Pascal, Mme. de Sevigne, Bossuet, Mme. de LaFayette, La Bruyere, and La Fontaine. The colorful reigns of Louis XIII and Louis XIV furnish the historical background of this century.

Credit: 4 semester-hours

FRENCH 202. *Corneille, Molière, Racine*

In this course one of the works of each of these three authors is studied closely in class and analyzed to appreciate its contribution to the development of the classical theater. Students report orally and in writing on the other main plays and make a careful study of the characters.

Credit: 4 semester-hours

THE THIRD YEAR

FRENCH 301. *French Civilization: Eighteenth Century*

This course aims to train students in all the phases of the literature of eighteenth century France. An attempt is made to evaluate French thought and to present a picture of French civilization as expressed in architecture, painting, sculpture, furniture, and music. This course constitutes an advanced language study based on *explication de textes* of representative authors, both prose writers and dramatists.

Credit: 4 semester-hours

FRENCH 302. *Development of the French Novel to 1890*

This course traces the development of the French novel from 1678 to 1890. Works characteristic of each period of development are read and analyzed for their background revealing life in France, their delineation of character, and their literary value and influence. The student is expected to read extensively and critically and to report on his findings.

Credit: 4 semester-hours

ELECTIVES

FRENCH 304. *French Literature for the High School*

This course is open to sophomore and junior French students. It acquaints the students with French authors suitable for study in the American high school. It helps the prospective teacher to select wisely those outside readings given to students in third and fourth year French, as well as the most representative works to be read in class from the eighth to the twelfth grades. The course is conducted entirely in French.

Credit: 2 semester-hours

FRENCH 306. *French Drama for High School Teachers*

This course is designed to acquaint students with a wide selection of French plays suitable for study in high-school classes in French. Attention is given to the special problems involved in producing a play in French with a high-school cast.

As a term project, the class produces one play to be selected from the course reading list. The course is conducted entirely in French.

Credit: 2 semester-hours

THE FOURTH YEAR

Theory and Practice in the Teaching of French

The courses in French during the senior year are designed to combine all the professionalization of previous French courses with a careful study of the teaching of French in the secondary schools. The period of practice teaching allows the prospective teacher to test his scholarly preparation under the guidance of a successful high-school teacher.

FRENCH 401. *The Teaching of French in Secondary Schools*

For a description of this course, see LANGUAGE 401, page 112.

Credit: 3 semester-hours

FRENCH 402. *French Grammar for Teachers*

The aim of this course is essentially professional. It provides a complete grammatical review with a wealth of collateral information on specific difficult points with demonstrations of teaching procedures. This course is closely integrated with LANGUAGE 401.

Credit: 4 semester-hours

FRENCH 404. *Survey of French Poetry*

This course presents a picture of the development of French poetry as an expression of different literary movements. Authors representative of each period are studied, with special emphasis placed on the nineteenth and twentieth centuries. The course is conducted in French and provides opportunity for the improvement of clearness of enunciation and pronunciation as well as for personal enrichment through an appreciation of French poetry.

Credit: 2 semester-hours

ELECTIVES

FRENCH 405. *Great Currents of Contemporary French Literature*

The survey of contemporary French literature is based on the study and interpretation of French civilization and literature in the pre-war, war, and post-war generations. The threefold aim of the course is: (1) to help the student to understand and to appreciate the new trends of thought in France through literary interpretation; (2) to enable him to plan his reading intelligently by selecting from the abundant materials that contemporary literature offers to his choice; and (3) to give him a background for a more thorough study of this period of French literature. The course includes lectures, class and individual readings, and discussions.

Credit: 3 semester-hours

FRENCH 406. *The Contemporary French Novel*

This course includes readings and discussions of contemporary French novels since Proust. The student studies the developments and latest contemporary trends in the modern French novel.

Prerequisite: FRENCH 405 or equivalent

Credit: 2 semester-hours

FRENCH 420. *French Culture for the Elementary School*

This course provides foreign language teachers on the elementary-school level with a rich background for the teaching of French in grades one through six. It includes a review of French human geography including the provinces, customs, food, songs, and dances; French history through a study of the great men and women of France; and French holidays and holy days. This course is conducted entirely in French, and the materials are presented with a view toward enabling teachers to present various aspects of French culture to elementary school pupils.

Credit: 3 semester-hours

FRENCH 421. *French Language Seminar*

This seminar course consists of a French-language laboratory in literature, civilization, phonetics, and conversation. Class work includes discussions, demonstrations, and evaluation of available audio-visual materials. Through "Travaux Pratiques" members of the class learn how to operate and maintain audio-visual equipment and prepare their own recordings. This seminar is conducted entirely in French.

This course carries a laboratory fee of \$10.00.

Credit: 2 semester-hours

THE GERMAN MINOR**SOPHOMORE YEAR****GERMAN 101. *German Civilization: Contemporary Germany*****GERMAN 102. *German Civilization: Selected Chapters of Its History***

These courses consist of an introduction to contemporary German civilization and to German history and geography. The courses are taught in German, and students are trained systematically in understanding and using idiomatic German. The courses offer practice in the techniques of intensive and extensive reading, in conversation, and in written work. Laboratory work is included as part of the requirements for the course.

Prerequisite: At least two, and preferably three or four, years of high-school German

Credit: 4 semester-hours each

JUNIOR YEAR

GERMAN 201. *German Literature: Prose and Poetry of the Nineteenth and Twentieth Centuries*

GERMAN 202. *German Literature: Prose and Poetry of the Late Eighteenth and Early Nineteenth Centuries*

The basic aim of these courses continues to give students facility in the spoken and written use of the language. The medium used to attain this end consists of selected works (fiction, essays, poetry, and drama) of German literature from the end of the Eighteenth Century to the present time. These courses serve to introduce students to the history and the problems of German literature.

Credit: 4 semester-hours each

SENIOR YEAR

GERMAN 402. *German Grammar for Teachers*

This course contains a comprehensive review of German grammar with special emphasis on difficulties encountered in teaching German to English-speaking students and on teaching procedures.

Credit: 4 semester-hours

LATIN

The courses in Latin are designed to continue the work begun in the language in high school. Further development of the ability to read and to comprehend the language and literature, and a deepening of the understanding and appreciation of the historical-cultural prominence of Rome and her contribution to Western civilization are basic objectives. Emphasis is placed upon the evolution of the language as it developed from the Greek to the Romance, upon the language of ideas as they are expressed in the literary masters, and upon the social, political, and economic institutions which have influenced the Western world.

LATIN MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i> ..	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A/ <i>Physical Science or</i>	4	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Sci. 100B <i>Biological Science</i>		Sci. 100C <i>The Earth Sciences</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	LAT. 102 <i>POETS OF THE GOLDEN AGE</i>	4
LAT. 101 <i>CICERO & ROMAN PHILOSOPHY</i>	4		15½
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	1½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	1½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
LAT. 201 ROMAN LETTER WRITING AND BIOGRAPHY	4	LAT. 202 ROMAN HISTORY	4
	<hr/>		<hr/>
	16½		16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
LAT. 301 ROMAN DRAMA	4	LAT. 302 ROMAN SATIRE	4
	<hr/>		<hr/>
	16		16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science	2	Ed. 4... <i>Education Elective</i>	3
Electives	4	Elective—Humanities	2
LAT. 401 TEACHING OF LATIN IN SECONDARY SCHOOLS	3	LAT. 404 MEDIEVAL LATIN	2
LAT. 402 LATIN GRAMMAR FOR TEACHERS	4		<hr/>
	<hr/>		15
	16		

Total: 128 semester-hours

Note: 9 semester-hours of electives must be selected in a secondary teaching field other than the major.

THE FIRST YEAR

LATIN 101. *Cicero and Roman Philosophy*LATIN 102. *Poets of the Golden Age*

These courses enable the student to sample the writings of the major figures in Rome's richest period. In connection with the reading of Cicero's philosophical essays, there is a survey of the development of Greek philosophy from the pre-Socratic to the Hellenistic periods and a discussion of its influence on Roman philosophical thought. The chief representatives of the Latin lyric are Catullus and Horace. Considerable attention is given to the content and structure of their poetry. Their Greek models are discussed together with a discussion of their influence on the western poetic tradition.

Credit: 4 semester-hours each

THE SECOND YEARLATIN 201. *Roman Letter Writing and Biography*LATIN 202. *Roman History*

The nature of the writings of the authors read from the Silver Age permits a more intimate view of the daily life of the Romans, completing the student's concept of a typical Roman, the public figure of the Late Republic and the private citizen of the Silver Age, as well as illustrating contrast in lofty and familiar language and style. The history of Rome is studied through the writings of Livy and Tacitus.

Credit: 4 semester-hours each

THE THIRD YEARLATIN 301. *Roman Drama*LATIN 302. *Roman Satire*

The Roman dramatists are presented not only because of the merit of the plays but also because of their value in the development of the drama as a literary type. The language in Plautus serves to illustrate early forms and the language in its developmental process. Terence is a model of the familiar, but elegant, Latinity of polite society. Both playwrights have had considerable influence on the pre-Elizabethan, Elizabethan, and Romance dramatists. The satire is a mirror reflecting the life of the period, indicating forces at work which are undermining Rome's great record and reputation, forces which eventually spell her decline.

Credit: 4 semester-hours each

ELECTIVESLATIN 303. *Lucretius*

This course includes the reading of *De Rerum Natura* with study and discussion of the relation of science and philosophy in antiquity with special emphasis upon Greek schools of thought and Roman interpretations of Hellenistic ideas. Attention is given to the antecedents of Modern Science with special attention upon the physical scientists including Democritus, the Greek atomic scientist who influenced Lucretius. This study is made with a view to developing a better understanding of the modern scientific age.

Credit: 2 semester-hours

LATIN 304. *Latin Literature for the High School*

This course includes a rapid rereading of the authors traditionally read in high school classes—Caesar, Cicero, and Vergil. A compilation of an anthology of selections from Latin literature which would be suitable for use to implement high school texts and which might serve as supplementary reading in an accelerated program is undertaken as a class project.

Credit: 2 semester-hours

THE FOURTH YEAR

The senior courses in Latin are designed to provide an outlet for the cumulative experience of the Latin student with great minds and great achievements of a great world power through teaching the language in a secondary school after materials and methods have been carefully collected and studied. The period of student teaching allows the prospective teacher to test his preparation under the guidance of a highly successful high-school teacher.

LATIN 401. *Methods of Teaching Latin in Secondary Schools*

This course includes a consideration of the aims and objectives of Latin teaching with emphasis upon the role of Latin in the high school curriculum and the integration of Latin with other high school subjects. A study of methods of teaching Latin is made in historical perspective. Teaching materials in the field are surveyed and collected. Other units developed in the course include audio-visual material, realia, preparation of and participation in classroom assignments and lessons in the demonstration high school, test construction and grading, and planning projects and club programs.

Credit: 3 semester-hours

LATIN 402. *Latin Grammar for Teachers*

The aim of this course is to develop a comprehensive view of Latin grammar, to give practice in the writing of Latin according to the styles of Caesar and Cicero, to study those styles as evidenced in the best-known works, and to set up standards of criticism of both prose and poetical writing. These objectives stress materials useful in high-school teaching.

Credit: 4 semester-hours

LATIN 404. *Medieval Latin*

The special emphasis in this course is on the transition of the language from Classical to Romance. The attention centers on literature of church and state for the purpose of studying the evolution of modern western ideas.

Credit: 2 semester-hours

ELECTIVE**LATIN 405. *The Elegy***

This course includes the reading of the Roman elegaic poets, Tibullus and Propertius, together with a study of the elegy as a form of poetic expression. Comparisons are made of the elegy in Latin and English literature.

Credit: 2 semester-hours

SPANISH

Following the trend of the times, the work in Spanish while maintaining the classic approach is now placing considerable emphasis on Hispanic-American civilization. To a great extent our national policy of Western hemisphere comity and the immediate economic importance of Central and South America underlie

the present keen interest of high-school students in the study of Spanish. The courses are given in Spanish and are designed to give the prospective teacher of Spanish ample opportunities for self-development in the foreign tongue through readings, discussions, and reports.

SPANISH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A/ <i>Physical Science</i> or		F.A. 100 <i>Intro. to the Visual Arts</i>	3
Sci. 100B <i>Biological Science</i>	4	Sci. 100C <i>The Earth Sciences</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	SPAN. 102 <i>CIVILIZATION OF SPAIN, II</i>	4
SPAN. 101 <i>CIVILIZATION OF SPAIN, I</i>	4		
	16½		15½

SOPHOMORE YEAR

Phys. Ed. 200A, <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
SPAN. 201 <i>HISTORY & LITERATURE OF THE PERIOD OF CONQUEST AND COLONIZATION OF HISPANIC AMERICA</i>	4	SPAN. 202 <i>LITERATURE AND HISTORY OF CONTEMPORARY HISPANIC-AMERICA</i>	4
	16½		16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
SPAN. 301 <i>THE PROSE OF THE GOLDEN AGE</i>	4	SPAN. 302 <i>THE DRAMA OF THE GOLDEN AGE</i>	4
	16		16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science	2	Ed. 4— <i>Education Elective</i>	3
Electives	4	Elective—Humanities	2
LANG. 401 <i>TEACHING OF MODERN LANGUAGES IN SECONDARY SCHOOLS</i>	3	SPAN. 404 <i>SURVEY OF SPANISH POETRY</i>	2
SPAN. 402 <i>SPANISH GRAMMAR FOR TEACHERS</i>	4		15
	16		

Total: 128 semester-hours

Note: 9 semester-hours of electives must be selected in a secondary teaching field other than the major.

THE FIRST YEAR

Spanish Civilization

SPANISH 101 AND 102. *Civilization of Spain*

This course centers on the appreciation and understanding of Spain through a study of the land and the people and the culture and the customs. Each region is taken up in turn for its different aspects. Novels, short stories, and plays of representative authors are read and discussed in class. The acquisition of factual knowledge is important, but fluency in speaking Spanish is the primary objective of this first year. This course is open to Spanish majors and selected minors. Laboratory work is included as part of the requirements for the course.

Credit: 4 semester-hours each

THE SECOND YEAR

Hispanic-American Civilization

SPANISH 201. *History and Literature of the Period of Conquest and Colonization of Hispanic-America*

SPANISH 202. *Literature and History of Contemporary Hispanic-America*

The work in Spanish during the second year is devoted entirely to the acquisition of knowledge about the current culture patterns of Hispanic-America. Each period is taken up in turn, and the social, political, and artistic aspects of life are treated through reading the works of outstanding authors, individual reports, and class discussions.

Credit: 4 semester-hours each

THE THIRD YEAR

The Spanish Classics

SPANISH 301. *The Prose of the Golden Age*

This course is designed to give an understanding and appreciation of the literary works of Miguel de Cervantes, *Don Quixote de la Mancha*, *Entremeses*, *Novelas Ejemplares*, emphasizing their ethical and artistic values.

Credit: 4 semester-hours

SPANISH 302. *The Drama of the Golden Age*

The most representative plays of Lope de Vega, Tirso de Molina, Calderón de la Barca, and Ruiz de Alarcon are read and analyzed for their sources, style, versification, and the character descriptions are examined against a comprehensive study of the historical background of the sixteenth and seventeenth centuries.

Credit: 4 semester-hours

ELECTIVES**SPANISH 304. *Medieval Spanish Literature***

This course presents a comprehensive review of outstanding works and themes which express the main features of Spanish literature, culture, and thought from the Eleventh Century to the advent of the Golden Century. A critical evaluation of the most representative works and authors from the Eleventh Century to the early decades of the Sixteenth Century and their contributions to the development of the Spanish literature and their relation to the European letters in general are also included.

Credit: 2 semester-hours

SPANISH 306. *Poetry and Prose of the Golden Age*

This course presents a study of representative poets of the Golden Century beginning with the Renaissance period, from the *lirica popular* and the *Romancero* through the adoption of the Italian forms and the mystic poets to the baroque period. Representative works in prose include the study of *La Celestina*, the picaresque novel, the *erasmistas*, and the *conceptismo* in Quevedo.

Credit: 2 semester-hours

THE FOURTH YEAR**Theory and Practice in the Teaching of Spanish**

The courses in Spanish during this year are designed to combine all the professionalization of previous Spanish courses with a careful study of the teaching of Spanish in secondary schools. The period of practice teaching allows the prospective teacher to test his scholarly preparation under the guidance of a successful high-school teacher.

SPANISH 401. *The Teaching of Spanish in Secondary Schools*

For a description of this course, see LANGUAGE 401, page 112.

Credit: 3 semester-hours

SPANISH 402. *Spanish Grammar for Teachers*

The aim of this course is essentially professional. It provides a complete grammatical review with a wealth of collateral information on specific difficult points with demonstrations of teaching procedures. This course is closely integrated with LANGUAGE 401.

Credit: 4 semester-hours

SPANISH 404. *Survey of Spanish Poetry*

This course is designed to give an understanding and appreciation of the different movements in Spanish poetry from the Middle Ages to the present with emphasis on the poets of the Twentieth Century.

Credit: 2 semester-hours

ELECTIVES**SPANISH 405. *Great Currents of Contemporary Spanish Prose***

This course aims to give a more complete appreciation and to test the student's growth in understanding those questions about contemporary Spain which were raised in the first year of Spanish. It traces the literary trends in the novel of recent years. Particular attention is devoted to the "1898 generation."

Credit: 3 semester-hours

SPANISH 415. *Projects in Spanish and Latin-American Folklore*

This course, designed particularly for teachers and students of Spanish, surveys briefly the aims of extra-curricular activities in the field of Spanish teaching and emphasizes especially: (1) the organization of extra-curricular activities, (2) practical instruction in the preparation of materials, songs, dances, costumes, and (3) artistic presentation of the results of the course in a carefully supervised program given on the college campus.

Credit: 2 semester-hours

SPANISH 420. *Spanish Culture for the Elementary School*

This course provides foreign language teachers on the elementary-school level with a rich background for the teaching of Spanish in grades one through six. It includes a review of human geography including the provinces, customs, food, songs, and dances; history through a study of the great men and women; and holidays and holy days of Spanish-speaking countries. This course is conducted entirely in Spanish, and the materials are presented with a view toward enabling teachers to present various aspects of Spanish culture to elementary-school pupils.

Credit: 3 semester-hours

SPANISH 425. *Contemporary Spanish-American Poetry*

This course concentrates on trends and schools in Spanish-American poetry from the innovations of the *modernistas* to representative works by poets of the present generation. The significance and scope of the *Poesia femenina* and interrelations between Spanish-American and American poets are covered. The course includes a complete survey and evaluation of the latest books, poetry magazines, and translations.

Prerequisite: Three years of college Spanish

Credit: 2 semester-hours

LANGUAGE**Background Course**

The students of all college departments are expected to broaden and intensify their command of English by taking the following course arranged by the Language Department for the junior year. It aims to arouse their intellectual curiosity

in the origin, development, and range of language in general, and of English in particular, so that, henceforth, they will be more word-conscious and their teaching will benefit by an extended and more sensitive use of their mother tongue.

THE THIRD YEAR

LANGUAGE 300. *Foundations of Language*

For a description of this course, see page 52.

Credit: 2 semester-hours

THE FOURTH YEAR

Professional Courses

Seniors in the Department of Foreign Languages are expected to gain a critical insight into modern methods of foreign-language teaching. An analysis of actual practice motivates the systematic survey of this field of special interest with a theoretical selection of aims and procedures in preparation for the teaching of foreign languages in high schools.

LANGUAGE 401. *The Teaching of Modern Languages in Secondary Schools*

The work of this course is focused on such topics as the following: values of foreign language teaching; ultimate and immediate aims in foreign language teaching; survey of the outstanding methods, pronunciation, oral work, reading, grammar, reviews, realia, examinations, tests, supervised study, etc. The course consists of readings and discussions, lesson planning and demonstrations, and organization of materials for use in student-teaching.

Credit: 3 semester-hours

LANGUAGE 402. *Phonetics*

This course aims to give special training in the analysis of speech production from the physiological and acoustical standpoints and in detecting, analyzing, and correcting errors in pronunciation of foreign languages. Students planning to teach French or Spanish are instructed in the use of the accepted symbols of the International Phonetic Association. Modern textbooks in foreign languages are examined for their treatment of pronunciation. This course consists of the making of phonetic charts, work in the phonetic laboratory, continued drill in transcribing passages from foreign languages into phonetic symbols. This course is open to juniors and seniors, majoring or minoring in Spanish or French.

Credit: 2 semester-hours

LANGUAGE 408. *Introduction to Language Laboratory*

This course is designed primarily to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials

for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audio-visual specialists, and is taught in English.

Credit: 2 semester-hours

LANGUAGE 412. *Foundations of Language, Advanced Course*

This course continues the study of linguistics in general and of our own Indo-European group in particular. It focuses especially upon the origin, history, and development of Latin, French, German, Spanish, and English phonology, morphology, and vocabulary. Through lectures and collateral reading the student is acquainted with the latest research findings in linguistics. Maps and charts are required for the graphic presentation of each unit of work, and an individual report on some phase of this field is presented to the class by every student.

Credit: 2 semester-hours

LANGUAGE 420. *The Teaching of Foreign Languages in the Elementary School*

This course includes an exploration of the reasons for teaching foreign languages in the elementary schools and a study of appropriate grade levels for beginning foreign languages. Current literature on this subject is used to provide study materials and bases for reports by students. Attention is given to the study and evaluation of the many syllabi and guides now available for the teaching of French and Spanish in the elementary school. As an outcome of this course a syllabus covering grades one through six is produced by the class.

Credit: 3 semester-hours

THE DEPARTMENT OF HOME ECONOMICS

The Department of Home Economics at Montclair State College has a two-fold purpose: (1) to improve individual and family living and (2) to prepare students for a career in teaching home economics in elementary and secondary schools.

Graduates with this major receive a Smith-Hughes certificate enabling them to teach in either a general or vocational home economics program in New Jersey. They also are prepared to teach any or all of the areas generally accepted as comprising home economics; i.e., foods and nutrition, clothing and textiles, family finance, home management and equipment, family relations, and child development.

Although the Department of Home Economics offers no minor, it invites and welcomes students from other departments to elect courses in home economics.

The Home Economics Department has planned experiences for majors to supplement classroom work. They are as follows:

1. *Summer Clothing Practicum*

After having completed HOME ECONOMICS 102, *Introduction to Clothing Selection and Construction*, two garments are to be constructed during the summer months. The instructor assists each student in planning and evaluating this experience. These garments are submitted for evaluation during the first week of the semester in which the student is enrolled in HOME ECONOMICS 204, *Advanced Clothing Selection and Construction*.

2. *Summer Work Practicum*

Students are to supplement course work with actual work experience. This consists of at least 300 hours of summer employment, with or without pay, in a carefully selected area to meet the individual student's educational needs. Usually this can be accomplished by eight weeks of employment. Preferably this work practicum should be done during the summer preceding the senior year. Students should sign up with the Department Chairman during the spring semester, and this experience is evaluated during the first two weeks of the fall semester of the senior year.

3. *Faculty Teas*

Each student is responsible for planning, organizing, and supervising the serving of at least one faculty tea. Preferably this experience should occur during the junior and senior years.

4. *Observations in the College High School*

Junior and senior students observe and participate in the College High School through demonstrations, arrangement of bulletin boards, and laboratory supervision. This experience will correlate with class work in HOME ECONOMICS 401A and 401B.

Students majoring in home economics are not permitted to hold off-campus jobs that interfere with the normal activities of teaching during junior or senior practicum. Residence in the home-management house requires participation in activities that generally prevent part-time employment off campus.

HOME ECONOMICS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
F.A. 100 <i>Intro. to Visual Arts</i>	3	Music 100 <i>Music Appreciation</i>	2
Ed. 100 <i>Mental Hygiene & Personal Adj.</i>	2	Science 100C <i>The Earth Sciences</i>	2
Chem. 103 <i>Chemistry for Home Economics, I</i>	3	Chem. 104 <i>Chemistry for Home Economics, II</i>	3
H.E. 101 <i>INTRODUCTION TO HOME ECONOMICS</i>	2	H.E. 102 <i>INTRO. TO CLOTHING SELECTION AND CONSTRUCTION</i> or H.E. 201 <i>INTRO. TO FOODS & NUTRITION</i>	3
	16½		16½

SUMMER CLOTHING PROJECT

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Development & Behavior I</i>	3	Ed. 202 <i>Human Development & Behavior, II</i>	3
Elective	2	Elective	2
Biol. 209 HUMAN BIOLOGY	3	Biol. 210 ELEMENTARY BACTERIOLOGY	4
H.E. 102 INTRO. TO CLOTHING SELECTION AND CONSTRUCTION or	3	H.E. 304 HOME MANAGEMENT & HOUSEHOLD EQUIPMENT	2
H.E. 201 INTRO. TO FOODS & NUTRITION		H.E. 301 THE CHILD IN THE FAMILY or	3
H.E. 301 THE CHILD IN THE FAMILY or	3	H.E. 302 MARRIAGE & FAMILY RELATIONS	
H.E. 302 MARRIAGE & FAMILY RELATIONS			
	17 1/2		17 1/2

SUMMER WORK EXPERIENCE

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
H.E. 202 MEAL PLANNING	3	Ed. 403A <i>Student Teach. & Jr. Practicum</i> (4 weeks off campus)	3
H.E. 204 ADVANCED CLOTHING SELECTION AND CONSTRUCTION	3	H.E. 305 FAMILY FINANCE	2
H.E. 401A HOME ECONOMICS EDUCATION, I (Junior Methods)	0	Lang. 300 <i>Foundations of Language</i>	2
H.E. 203 TEXTILES	2	PREPARATION FOR RESIDENCE	0
H.E. 303 HOUSING & HOME FURNISHINGS	3	H.E. 401B HOME ECONOMICS EDUCATION, II (Senior Methods)	3
Elective	2	Elective	2
	16		15

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 4— <i>Education Elective</i>	3
H.E. 403 HOME MANAGEMENT HOUSE RES.	3	Elective—Humanities	2
Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5	Math. 400 <i>Educational Statistics</i>	2
Eng. 100G <i>Western World Literature</i>	3	H.E. 402 NUTRITION & GROUP FEEDING	2
Elective	2	Elective	2
	16	H.E. 404 VOCATIONAL EDUCATION	2
			13

Total: 128 semester-hours

FRESHMAN YEAR

HOME ECONOMICS 101. *Introduction to Home Economics*

This is an orientation course designed to introduce the home economics freshman to general college life. An opportunity is provided for the students to meet with some of the college faculty and to become aware of the many college facilities. A study is made of the history, scope, and professional requirements and opportunities in the field of home economics. Visits are made to public-school programs in home economics.

Credit: 2 semester-hours

HOME ECONOMICS 102. *Introduction to Clothing Selection and Construction*

This course is an introduction to the study of the important position of clothing, considering sociological, psychological, and economic aspects. Clothing planning, selecting, and buying are studied. The choice and use of color, design, and fabric in relation to individual clothing needs are emphasized and applied in the construction of simple garments.

Credit: 3 semester-hours

RELATED SCIENCE**CHEMISTRY 103 and 104. *Chemistry for Home Economics***

This course provides an opportunity for students of home economics to become acquainted with the major principles of chemistry and their application in the field of home economics. The work of the first semester deals with topics selected from the field of inorganic chemistry. The work of the second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to home economics. The course consists of class discussions, reference work, laboratory and field trips which attempt to show the importance of the contributions of chemistry to the field of home economics.

Credit: 3 semester-hours each

SOPHOMORE YEAR**HOME ECONOMICS 201. *Introduction to Foods and Nutrition***

The essentials of an adequate diet; the functions of various food nutrients and their requirements by different individuals; selection and preparation of foods for the family, emphasizing the basic principles and processes, are the principal topics of this course. Some problems treated in this course relate to the preparation of vegetables, meats, breads, cakes, and pastry. Standard techniques of food preparation are stressed.

Credit: 3 semester-hours

HOME ECONOMICS 202. *Meal Planning*

Planning, marketing, preparing, and serving nutritionally adequate and attractive meals for families of varying incomes are subjects covered in this course. Consideration is given to typical family meal problems. Emphasis is on management of time, energy, and equipment.

Credit: 3 semester-hours

HOME ECONOMICS 203. *Textiles*

This course provides a study of the factors that influence durability, use, and price of household and clothing fabrics. Recognition and analysis of fibers, fabrics, and finishes, centered around problems in the selection and buying of textiles for clothing and household purposes are included in the course. Consumer education in the field of textiles and textile economics is stressed.

Prerequisites: CHEMISTRY 103 and 104

Credit: 2 semester-hours

HOME ECONOMICS 204. *Advanced Clothing Selection and Construction*

Advanced construction principles with an intensive study of the practical methods of solving fitting problems are treated in this course. Application is made of the principles of costume design in clothing selection of ready-to-wear clothing as well as in the construction of advanced clothing projects.

Prerequisite: HOME ECONOMICS 203

Credit: 3 semester-hours

RELATED SCIENCE**BIOLOGY 209. *Human Biology***

This course is designed for home economics majors. Bodily structure, functioning of parts, how that functioning affects human behavior are all considered. Primary emphasis is placed upon physiology rather than morphology and upon the maintenance of good health of the individual and of the community.

Credit: 3 semester-hours

BIOLOGY 210. *Elementary Bacteriology*

Since the course is designed for the home economics student, it is concerned primarily with these bacteria and fungi associated with food and nutrition, sanitation, hygiene, industry, and disease. Identification of the organisms, their economic importance, and their control are emphasized.

Credit: 4 semester-hours

HOME ECONOMICS ELECTIVES**HOME ECONOMICS 105. *Principles of Clothing Selection for the Individual***

This course is open to all college students. Choosing appropriate clothing for different activities and considering choice and use of color, design, and fabric in relation to individual needs are stressed. Choices of accessories, grooming, care of clothing, budgeting, and consumer problems are discussed.

Credit: 2 semester-hours

HOME ECONOMICS 205. *Marriage and Family Relations*

This course is designed as an elective for men and women. Consideration is first given to factors in choosing a mate followed by adjustments in marriage. Family relations throughout the family-life cycle are included. Credit cannot be given for both HOME ECONOMICS 205 and 302.

Credit: 2 semester-hours

JUNIOR YEAR**HOME ECONOMICS 301. *The Child in the Family***

The purpose of this course is to develop an understanding of the role of the family in meeting the basic needs of children and in guiding their development.

Opportunities are provided for supervised observation and participation with groups of pre-school children.

Credit: 3 semester-hours

HOME ECONOMICS 302. *Marriage and Family Relations*

Topics of this course include emphasis on preparation for marriage and problems of human behavior within homes: emotional development, personality, environmental, and background factors in relation to marriage adjustment, and family relations of the individual throughout the family-life cycle. Credit cannot be given to both HOME ECONOMICS 205 and 302.

Credit: 3 semester-hours

HOME ECONOMICS 303. *Housing and Home Furnishings*

Housing needs of the family today and the factors that affect them; family differences, costs, space organization, housing control and legislation, and construction materials used are discussed. Furnishings for the home—furniture, rugs, draperies, etc. — and how to select, buy, and arrange them in different kinds of homes are topics of study.

Credit: 3 semester-hours

HOME ECONOMICS 304. *Home Management and Household Equipment*

Equipment that is used in the home and how to use it effectively; principles of time and energy management; storage; materials used in household equipment; how equipment is constructed for durability, suitability, and ease in cleaning are important topics of this course. Opportunities are provided to evaluate various kinds of equipment including sauce pans, egg beaters, toasters, washing machines, irons, vacuum cleaners, etc.

Credit: 2 semester-hours

HOME ECONOMICS 305. *Family Finance*

Money management, budgeting, saving, use of credit, insurance, annuities, investments, taxation and disposing of property are the principal topics of this course. The effect of outside economic conditions on family financial planning is studied.

Credit: 2 semester-hours

HOME ECONOMICS 401A. *Home Economics Education, I* (Junior Methods)

This course is designed to help the prospective teacher in the assembling and presentation of subject-matter. Topics included are: planning, unit and lesson plan construction, the use of audio-visual materials, choice and use of materials of instruction, and teaching techniques.

Credit: 0 semester-hours

HOME ECONOMICS ELECTIVES**HOME ECONOMICS 306. *Nutrition and Health***

This is a foundation study of human nutrition including its importance to optimum physical and emotional health, indications of good nutrition, body requirements of various food elements, planning the family diet, diet patterns for various age groups, and specific conditions. This course is designed for non-home economics majors, and majors in home economics may not take this course.

Credit: 2 semester-hours

HOME ECONOMICS 307. *Nutrition*

This course is designed to broaden the student's appreciation of the importance of good nutrition to individual well-being. A resume of basic scientific nutrition information together with its application to specific age groups is included. An investigation is made of various deficiency diseases and current problems in nutrition. Consideration is given to discussion of effective methods of nutrition education. Only home economics majors may register for this course.

Credit: 2 semester-hours

HOME ECONOMICS 310. *Experimental Foods*

This is a comparative approach to cookery methods with emphasis on the newer techniques. It is slanted to the needs of the prospective teacher. Each student does experimental laboratory work on selected phases of cookery.

Credit: 3 semester-hours

SENIOR YEAR**HOME ECONOMICS 401B. *Home Economics Education, II (Senior Methods)***

Planning courses of study, illustrative material, evaluating teaching techniques, planning space and equipment needs, administrative problems, home economics clubs, vocational home-making programs, adult classes, and the place of the home economics teacher in the total school program are the topics of this course.

Credit: 3 semester-hours

HOME ECONOMICS 402. *Nutrition Education and Group Feeding*

This course includes a study of adequate menu planning for large groups, use of standardized recipes, quantity buying and preparation of foods, and problems involved in school-lunch management.

Prerequisite: HOME ECONOMICS 202

Credit: 2 semester-hours

HOME ECONOMICS 403. *Home Management House Residence

This course includes residence in the home management house integrating the understanding, knowledge, and skill gained from various phases of home economics. Principles of time, energy, and money management are put into practice. Planning and preparing meals, doing the laundry, cleaning and caring for the house, and planning and carrying through a variety of entertainments are examples of home-making activities experienced by the student.

Credit: 3 semester-hours

HOME ECONOMICS 404. *Vocational Education*

(This course is submitted to fulfill the requirements for the New Jersey state plan for certification of home economics teachers which reads: "A course in Principles of Vocational Education must be taken for vocational certification.")

This course presents a history of the development, organization, and purposes of vocational programs and implications for future growth. A study is made of the characteristics of the vocational homemaking program which set it apart from the non-vocational homemaking program. The role of the U.S. Office of Education, Vocational Division, in the interest of home economics is defined.

Credit: 2 semester-hours

HOME ECONOMICS ELECTIVES**HOME ECONOMICS 405. *Advanced Child Development***

This course includes observation and participation in the activities of a nursery school. It is based on actual experience in the program such as: observation and helping with daily routine, preparation of food, directing play activities, musical activities, story telling, and similar activities.

Prerequisite: HOME ECONOMICS 301, *The Child in the Family*

Credit: 2 semester-hours

HOME ECONOMICS 406. *Tailoring*

This course is designed for home economics majors. Fundamental processes and procedures for constructing tailored garments are included. The differences between dressmaking and tailoring techniques are emphasized, and a comparison is made between factory-made garments and custom tailoring.

Prerequisite: HOME ECONOMICS 204

Credit: 2 semester-hours

HOME ECONOMICS 407. *Consumer Information*

This course is designed to examine the field of consumer economics. Factors of significance to homemakers as consumers are considered, including advertising,

* Married students with family responsibilities are not required to reside in the home management house. They are, however, expected to take part in many of the activities of the home management house and to carry out additional projects in their own homes. They receive credit for Home Economics 403A—Home Management.

branding, grading, and labeling. Legislation related to the consumer and consumer practices which affect cost are discussed.

Credit: 2 semester-hours

HOME ECONOMICS 408. *Family Health and Home Nursing*

This course is designed for home economics majors. Common health problems are considered with emphasis on the family approach. Simple methods for home care of the ill and convalescent are included. Extensive consideration is given to methods of teaching home nursing and family health at the secondary level.

Credit: 2 semester-hours

HOME ECONOMICS 409. *Current Problems in Home Economics Teaching*

The purpose of the course is to help in-service teachers and prospective teachers of home economics plan and teach an effective homemaking program. Topics included are: planning a well-rounded and effective program of home economics; using the New Jersey curriculum guide in program planning; evaluating audio-visual materials; working effectively in the short period; working with exceptional children, both retarded and above average children; correlating the homemaking program with other departments in the school; planning and reorganizing home economics departments; and reviewing new methods of teaching home economics.

Prerequisite: Home economics teaching experience or student teaching

Credit: 2 semester-hours

HOME ECONOMICS 411. *Methods in Teaching Marriage and Family Relations*

This course provides study of and experience with the techniques of teaching this area of home economics education in the senior high school. The utilization of films, bulletin boards, panel discussions, small and large groupwork, role-playing, field trips, and resource people in the community is explored. Consideration is given to planning units of work based on students' needs and interest at this level.

Credit: 2 semester-hours

HOME ECONOMICS 420. *Current Practices in Teaching Family Living*

This course is a study of an experience with the techniques of teaching this area in the senior high school. Use of films, bulletin boards, panel discussions, small and large group work, role-playing, field trips and resource people in the community are explored. Planning units of work based on students' needs and interest at this level is considered.

Credit: 2 semester-hours

HOME ECONOMICS 421. *New Developments in Clothing and Textiles*

Courses of study in elementary and secondary schools are examined in order to throw light on present practices used in the teaching of clothing and textiles.

An attempt is made to stimulate original thinking for the teaching of clothing and textiles and to show how clothing and textiles can be interrelated to each of the other areas of home economics. Actual plans for teaching a comprehensive program in clothing and textiles in the elementary and secondary schools are formulated.

Prerequisites: HOME ECONOMICS 102, 201, 401A, or equivalents

Credit: 2 semester-hours

THE DEPARTMENT OF INDUSTRIAL ARTS

The Industrial Arts Department emphasizes the relation of the cultural aspects of arts to the development of civilization and the vital part that industry plays in the life of each of us today. Creative satisfactions resulting from well-designed and carefully executed projects are provided for in the experience the student finds in this area.

The industrial arts program of the College offers opportunities for the student to broaden his concepts of the industrial world in which he lives. This is achieved through experiences in the graphic arts and drawing, woods and crafts, and metals and powers areas. It is presupposed that the student enrolling in the industrial arts program has had preliminary training. In addition to increasing the above knowledges and skills, the student is directed in the techniques of teaching industrial arts in the elementary, junior, and senior high schools.

Students applying for admission to the industrial arts program are encouraged to gain industrial experiences through actual contact with industrial firms. Students who complete this curriculum are prepared to teach industrial arts in the elementary schools, junior high schools, and the senior high schools of New Jersey.

INDUSTRIAL ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Music 100 <i>Music Appreciation</i>	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Sci. 100 A <i>Physical Science or</i>	
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100B <i>Biological Science</i>	4
I.A. 100 <i>INTRO. TO INDUSTRIAL ARTS</i>	2	Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2
I.A. 101A <i>GRAPHIC ARTS & DRAWING, I</i>	4	I.A.101B <i>GRAPHIC ARTS & DRAWING, II</i>	4
	16½		16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200 B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
H.Ed. 100 <i>Healthful Living</i>	2	Math. 300 <i>Social Uses of Mathematics</i>	2
I.A. 201A <i>WOOD AND CRAFTS, I</i>	4	I.A. 201B <i>WOOD AND CRAFTS, II</i>	4
I.A. 202A <i>METALS AND POWER, I</i>	4	I.A. 202B <i>METALS AND POWER, II</i>	4
	16½		16½

JUNIOR YEAR

Ed. 304X <i>Prins. & Methods of Teaching</i>	3	Ed. 303 <i>Teacher in School & Community</i>	3
I.A. 300A <i>PRINCIPLES OF INDUSTRIAL ARTS</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus)....	3
I.A. 302 <i>GRAPHIC ARTS & DRAWING, III</i>	4	I.A. 300B <i>CURRICULUM & TEACHING OF I.A.</i>	2
I.A. 303 <i>METALS AND POWER, III</i>	4	I.A. 301A <i>WOOD AND CRAFTS, III</i>	4
Electives	4	Speech 100D <i>Fundamentals of Speech</i>	3
	17		15

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Lang. 300 <i>Foundations of Language</i>	2
Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5	Math. 400 <i>Statistics</i>	2
Eng. 100G <i>Western World Literature</i>	3	Ed. 4— <i>Education Elective</i>	3
Elective (Industrial Arts elective will be offered)	4	Elective— <i>Mathematics or Science</i>	2
	15	Elective— <i>Humanities</i>	2
		Elective—(Industrial Arts elective will be offered)	4
			15

Total: 128 semester-hours

FRESHMAN YEAR

INDUSTRIAL ARTS 100. *Introduction to Industrial Arts*

This is an orientation course introducing the student to the nature and content of the industrial arts program, the laboratory technique for individuals and groups, techniques of study, organizational problems in the laboratory, and the professional aspects in a career as an industrial arts teacher.

Credit: 2 semester-hours

INDUSTRIAL ARTS 101A. *Graphic Arts and Drawing, I*

This course is intended to be quite general in scope and is organized as an introductory shop course. The graphic arts area includes an introduction to printing, study of basic technical information, composition, proof reading, distribution, press work, paper cutting, padding. The drawing area includes an introduction to drawing instrument selection, sketching, blackboard illustration, basic design, single and multiview projections, lettering, sections and conventions, dimensions, and notes.

Credit: 4 semester-hours

INDUSTRIAL ARTS 101B. *Graphic Arts and Drawing, II*

The second experience in the area of graphic arts and drawing affords the student opportunity for further exploration and study. The area of graphic arts includes principles of layout and design, ink, paper, linoleum block arts, wood arts, composition, and presswork. Drawing embodies the development of surfaces and intersections, revolutions, pictorial representation, perspectives, pictorial sketching, illustrations, and axonometric drawing.

Credit: 4 semester-hours

SOPHOMORE YEAR**INDUSTRIAL ARTS 201A. *Wood and Crafts, I***

This is an introductory course in hand woodwork and simple crafts where skills, techniques, and procedures are acquired through actual participation in activities involving materials, tools, and procedures. Emphases in the area of wood are on lumber, hardware, glue jointry, tool operations, equipment, layout, and design. Areas in crafts include carving, plastics, candle making, keene cement, and the more common crafts.

Credit: 4 semester-hours

INDUSTRIAL ARTS 201B. *Wood and Crafts, II*

Advanced experience in wood and crafts provides for further development of basic skills and techniques that lead to further exploration and experimentation. The area of wood incorporates the hand tool processes, the preparation of wood for finishing, the study and use of stains, fillers, shellac, lacquer, varnishes, paints and solvents, compound finishes, French polish, and refinishing. Craft areas include copper foil, jewelry, tin craft, lapidary, etching, basketry, and chair caning.

Credit: 4 semester-hours

INDUSTRIAL ARTS 202A. *Metals and Power, I*

This course presents an introduction to the area of metal and power where basic fundamentals, procedures, and techniques are studied. The area of metal includes the design and development of projects in sheetmetal, art metal, spinning, and plating. Power incorporates the study of atomic structure, static electricity, circuits, power theory, wire sizes and resistance, temperature, coefficients, magnetism, electromotive forces, and meters and measurements.

Credit: 4 semester-hours

INDUSTRIAL ARTS 202B. *Metals and Power, II*

The second experience in metal and power enlarges on previously developed skills and techniques through further exploration and experimentation. The area of metal provides opportunity for wrought iron work, bench metal work, forging, annealing, and heat treating. Power includes the study of electrical development and transmission, AC-DC theory, motors and generators, household mechanical and appliance repairs, communications, radio, and television.

Credit: 4 semester-hours

JUNIOR YEAR**INDUSTRIAL ARTS 300A. *Principles, Methods, and Curriculum in Industrial Arts, I***

The development and expansion of industrial arts over the years points up many principles that exemplify its present philosophy. To understand these principles the industrial arts program in the modern school is approached through a

study of the purposes of general education, industrial arts as general education, basic concepts of democracy, education as a meeting of needs, relationship of industrial arts to general education, industrial arts objectives, terminology, basic conclusion of program of industrial arts organization and shop management, and evaluation of programs.

Credit: 2 semester-hours

INDUSTRIAL ARTS 300B. *Principles, Methods, and Curriculum in Industrial Arts, II*

An overview of accepted industrial arts curriculum and teaching practices which are in use in public schools constitutes the major area of this course. The various types of problems investigated include organization of the general shop, records, finance, distribution of supplies and equipment, operational responsibilities, safety, related information and guidance, industrial arts and public relations, testing and recording progress, industrial arts laboratory planning, industrial arts equipment selection, the teacher and his profession.

Credit: 2 semester-hours

INDUSTRIAL ARTS 301A. *Wood and Crafts, III*

The third experience in wood and crafts provides an opportunity for the student, who by now has acquired an adequate wood and crafts background, to undertake more advanced work. The wood area entails the study of safety, maintenance, and operation of all common woodworking machines, along with various types of project design and development. The crafts emphasize the importance of ceramics. The area includes the study of clay; making ceramic pieces by the pinch, coil, slab, throw, or cast method; glazing; and firing.

Credit: 4 semester-hours

INDUSTRIAL ARTS 302. *Graphic Arts and Drawing, III*

The third experience in graphic arts and drawing provides opportunity for exploring the more advanced areas in these fields. The graphic arts area includes photography, bookbinding, duplicating, rubber stamp, dry point etching, and silk-screening. The emphasis in drawing is placed upon schematic drawings, advanced design, working drawings, detailed drawings, architectural drawings, exploded view drawings, assembly drawings, and reproduction of drawings.

Credit: 4 semester-hours

INDUSTRIAL ARTS 303. *Metals and Power, III*

The third experience in metal and power gives advanced work in these areas. The metal area includes activities in brazing, foundry, machine shop, low pressure welding, and mass production techniques. The power area involves experiences in auto mechanics, power mowers, outboard motors, diesels and other combustion engines, mechanical power, steam power, and hydraulics.

Credit: 4 semester-hours

ELECTIVES

INDUSTRIAL ARTS 401. *Comprehensive General Shop for Elementary and Junior High Schools*

Laboratory experiences are organized according to the principles and philosophy of a general shop at the kindergarten, elementary, and junior high school levels. Each student has the opportunity to plan a laboratory program entailing as many of the areas as needed to produce the type of program found at these levels in the public schools of New Jersey. All students are encouraged to gain experience at the kindergarten, elementary, and junior high school levels as consultants working with the classroom teachers of these levels. Students are encouraged to develop class units, group projects, and individual projects which are related to the lives of boys and girls in these grade classifications.

Credit: 4 semester-hours

INDUSTRIAL ARTS 402. *Comprehensive General Shop for Senior High School*

In this course laboratory experiences are organized under the principles and philosophy of a general shop at the high-school level. Students are encouraged to develop class units, group projects, and instructional materials, and to perfect or develop new technical skills appropriate for the high-school level.

Credit: 4 semester-hours

INDUSTRIAL ARTS 406. *Industrial Arts Instructional Materials*

Laboratory and seminar experiences are organized to prepare courses of study, to write instructional materials, and to construct tests and other devices for evaluating the progress of pupils. Community resources are utilized to correlate them with the school experiences.

Visual aids are examined and constructed to solve specific teaching problems. Teaching techniques are strengthened through the application of demonstrations using various materials created. Various methods used in the requisition of tools, materials, and equipment are studied through theory and practical applications.

Credit: 4 semester-hours

INDUSTRIAL ARTS 407. *Field Study of the Practical Arts*

The course offers the industrial arts student a more lucid understanding and appreciation of the practical concepts and origins of his major field. Visits to industrial plants broaden professional potentials by providing firsthand experiences in the industries represented by the major areas in the comprehensive industrial arts laboratory. Through seminar classes, the student selects and determines directly the industries and exhibits to be visited and the objectives to be realized for each experience.

Credit: 4 semester-hours

INDUSTRIAL ARTS 408. *Industrial Arts Work Shop*

In the course the student is encouraged to outline and direct his own laboratory experiences under the consultation and supervision of a faculty member. The student may develop depth, breadth, and operational and motor skills suited to his level of interest. He may elect to work in one or more areas.

Credit: 4 semester-hours

INDUSTRIAL ARTS 409. *Mechanical Drawing and Woodworking*

Mechanical Drawing and Woodworking is an industrial arts elective designed primarily for the student majoring in fine arts. In this course each student learns about the basic tools, materials, and methods used in mechanical drawing and woodworking so that he may apply this knowledge in expressing himself in his major field.

Credit: 2 semester-hours

INDUSTRIAL ARTS 442. *Conservation of Basic Industrial Materials*

In this course the students live for ten days at the New Jersey State School of Conservation, Stokes State Forest. Study is devoted to the origin, development, use, and consumption of the basic industrial materials as they exist in their natural state. The materials studied include wood, plastics, leather, ores, petroleum, textiles, and steel. The course material is developed through the use of (1) field trips to the natural sources of supply and basic industries, (2) films concerning the materials and their use in industry, and (3) discussion periods with the specialists of industry and government officials who are responsible for conserving and using these materials.

NOTE: The fee for this course is \$60.00 which includes tuition, board, lodging, transportation on field trips, and use of recreational facilities.

Credit: 2 semester-hours

INDUSTRIAL ARTS 443. *The Use and Processing of Basic Industrial Materials by Modern Industry*

In this course the students live for ten days at the New Jersey State School of Conservation, Stokes State Forest. Study is devoted to the recognition, use, and processing of the basic industrial materials as done by industrial concerns. The materials studied evolve around the use of ores, wood, fuels, and agricultural products as they are transformed or processed by industry in the making of additional semi-finished raw materials such as plastics, leather, pewter, textiles, ceramics, steel, and metal products. The course material is developed through the use of (1) field trips to the industries, (2) films and visual aids concerning the transformation of the basic materials by industry, and (3) discussion periods with specialists of the industry, government officials, and educators.

NOTE: The fee for this course is \$60.00 which includes tuition, board, lodging, transportation on field trips, and use of recreational facilities.

Credit: 2 semester-hours

THE DEPARTMENT OF MATHEMATICS

Prospective teachers of secondary-school mathematics are selected with much care on the basis of personal interviews, written examinations, previous scholastic record, and recommendations from their respective high schools. Students thus selected can achieve a broad cultural background, a thorough understanding of their chosen field of work, and a good working knowledge of the problems, techniques, and methods of procedure in the teaching of mathematics in the modern secondary school.

Scholarship in mathematics can result only from continued study of mathematics; it cannot result from a mere review of high-school courses. Hence, the course of study in mathematics provides for a study of topics in college mathematics with continual emphasis on their use as a background for teaching. Courses have been selected to the end that the students become proficient in various fields of mathematics.

Mathematics for a student in teacher education differs little in actual content from that for a student in a liberal arts program. Since the student is preparing to teach mathematics to secondary-school pupils, he must not only have a mastery of the topics he is to teach, but must also see them as an integral part of the subject-matter of mathematics in the entire program of mathematics in the elementary and secondary school program. He must know the place of mathematics in the history of civilization and its practical uses; he must not only understand the uses and limitations of formulas, but must also be able to derive them from simpler ideas. He must not only understand fundamental principles, but must also acquire the facility of making them clear to others and of searching out the obstacles that hinder another's understanding. Thus, in a teacher-education curriculum the student acquires not only a mastery of the content but an understanding of its professional significance in the teaching process.

The courses offered by the Department of Mathematics are taught with the following objectives in view:

1. To give the student a review of and practice in those topics in mathematics which he will be required to teach. This is best done by having such review an incidental part of the advanced work in mathematics rather than a repetition of high-school subject-matter.

2. To provide an understanding of the mathematical concepts which underly those the student will be required to teach.

3. To note that many phases of college mathematics are simply the extension or continuation of similar topics in high-school mathematics.

4. To give the student that self-confidence which is the concomitant of a broad knowledge of subject-matter beyond minimum requirements.

5. To supply a cultural background and an awareness of the specific contributions which mathematics has made to civilization.

6. To make the student aware, through observation and participation in teaching in the College High School, of the character and diversity of the problems arising in teaching mathematics to secondary-school pupils.

7. To integrate the work with other courses, particularly science, social studies, and economics, so that the student will realize the effectiveness of mathematics as a tool in solving scientific and sociological problems.

No student should attempt to major in mathematics who has not demonstrated his ability by his high-school work in at least elementary and intermediate algebra, geometry, and trigonometry. Students who major in mathematics should consult with their advisers in the Mathematics Department before selecting a field of minor interest.

MATHEMATICS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i> ..	½
Soc. St. 100A <i>Dev. of World Civiliza- tion</i>	3	Soc. St. 100B <i>Dev. of World Civiliza- tion</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A <i>Physical Science or</i>		Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2
Sci. 100B <i>Biological Science</i>	4	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Mus. 100 <i>Music Appreciation</i>	2	MATH. 102 MATHEMATICAL ANALY- SIS, II	4
MATH. 101 MATHEMATICAL ANALY- SIS, I	4		
			15½
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i> ...	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary Ameri- can Life</i>	3	Soc. St. 200B <i>Contemporary Ameri- can Life</i>	3
Ed. 201 <i>Human Dev. and Behavior, I</i>	2	Ed. 202 <i>Human Dev. and Behavior,</i>	
H. Ed. 100 <i>Healthful Living</i>	3	II	3
Electives	4	Sci. 100C <i>The Earth Sciences</i>	2
MATH. 201 CALCULUS, I	4	Electives	4
		MATH. 202 CALCULUS, II	4
	16½		
			16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Commu- nity</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Lang. 300 <i>Foundations of Language</i> ..	2	Eng. 100G <i>Western World Literature</i>	3
Electives	4	Electives	4
MATH. 307 INTRO. TO MATHEMA- MATICAL STATISTICS	3	MATH. 308 THE TEACHING OF JUN- IOR HIGH SCHOOL MATHEMATICS	2
MATH. 302 HIGHER ALGEBRA	4	MATH. 301 MODERN COLLEGE GEOMETRY	4
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Math. or Science</i>	2	Ed. 4— <i>Education Elective</i>	3
Elective— <i>Humanities</i>	2	Elective	2
Elective	3	MATH. 404 MODERN MATHEMA- TICAL LITERATURE	2
MATH. 401 THE TEACHING OF MATHEMATICS IN SECONDARY SCHOOL	3		15
MATH. 402 APPLICATIONS OF MATHEMATICS	3		
	16		

Total: 128 semester-hours

NOTE: 9 semester-hours of electives must be selected in a secondary teaching field other than the major.

Students who anticipate selecting mathematics as a field of minor interest should consult with the Chairman of the Mathematics Department before beginning such work. The following courses are required for all mathematics minors: MATHEMATICS 101, 102, 201, 202, 401, and one two-point elective, making a total of 21 semester-hours.

MATHEMATICS 304 is required of mathematics majors and minors who have not studied solid geometry in high school and is recommended as an elective for others.

All students in the College are required to take some mathematics courses as part of their requirements in general education. The selection of such courses often depends upon the student's major field. Students may also qualify for special work in mathematics by taking a placement examination. Most students take both MATHEMATICS 300 and 400 before taking an elective course in either mathematics or science. Mathematics majors take MATHEMATICS 308 and 307 instead of MATHEMATICS 300 and 400.

THE FIRST YEAR

The mathematics of the first year is organized as a single unit of work. The traditional subjects of college algebra, trigonometry, and analytical geometry are not treated as separate and distinct subjects. Rather they are interwoven, with some elementary logical concepts, into an integrated course in mathematical analysis.

Elementary mathematical analysis forms an essential part of the preparation for teaching high-school mathematics. Due attention is given to the professionalization of subject-matter by continued application of knowledge previously gained, by creating a desire for further investigation, by repeated application of the scientific method of thinking, by having the student make careful analyses and explanations, and by showing how certain phases of the work may be transferred to high-school situations. As an integral part of the students' training, this first year of mathematics serves three purposes: it forms a foundation for further work in mathematics; it forms a background course for the investigation of other sciences; and it gives knowledge and training, which can be used in the teaching of high-school mathematics.

MATHEMATICS 101. *Mathematical Analysis, I*

The principal topics include: logic and sets, natural numbers, rational numbers, algebraic expressions, real numbers, equations and their graphs, inequalities and their graphs, inverse functions, number notations, exponential and logarithmic expressions, and complex numbers.

Credit: 4 semester-hours

MATHEMATICS 102. *Mathematical Analysis, II*

The principal topics include: probability, trigonometric and circular functions, complex numbers, vectors, conic sections, limits of sequences, curve tracing, and the analytic geometry of three dimensions.

Credit: 4 semester-hours

Mathematics Courses for Science Majors**MATHEMATICS 103. *Mathematics for Science Majors, I***

This course seeks to develop understandings and skills in the mathematics necessary for effective work in the physical and biological sciences. Its primary emphasis is on the topics of mathematical analysis preliminary to a thorough course in differential and integral calculus. The topics included are: polynomial functions of the first and second degree with a consideration of those of higher degrees; direct, inverse, and joint variation and their applications in the sciences; scientific notation; computational aids as logarithms, slide rule, mathematical tables, and calculating machines; and a study of exponential functions.

Credit: 3 semester-hours

MATHEMATICS 104. *Mathematics for Science Majors, II*

This course constitutes a continuation of the work in mathematical analysis begun in MATHEMATICS 103. The principal topics are: trigonometric functions, elements of analytic geometry and the related material of differential calculus which aids in the analysis of polynomial functions as applied to the physical and biological sciences, a consideration of the fundamentals of elementary statistics, frequency distributions, measures of central tendencies and variability, probability, sampling, statistical inference, regression lines, and correlation analysis.

Credit: 3 semester-hours

THE SECOND YEAR

A study of differential and integral calculus is made the second year. The entire year's work forms a unit sequential to that taken the first year. Professionalization is effected, as in the first year, by emphasis on participation in class discussions by the students with emphasis on clear and concise explanations.

MATHEMATICS 201. *Calculus, I*

Important objectives of this course are the development of a clear understanding of the limit concept and of the meaning of the derivative and integral of a function. Emphasis is also placed on the development of facility in the computation of derivatives of algebraic and transcendental functions and of simple integrals. Applications of the derivative to such problems as maxima and minima, curve tracing, related rates, and differentials are included. Applications of the definite integral to area are discussed.

Credit: 4 semester-hours

MATHEMATICS 202. *Calculus, II*

This course is a continuation of MATHEMATICS 201. Formal procedures for integration are developed, and applications of integration to volume, moments, fluid pressure, and work are discussed. Other topics include infinite series, expansion of functions, hyperbolic functions, partial differentiation, and multiple integration.

Credit: 4 semester-hours

ELECTIVES**MATHEMATICS 209. *Introduction to Finite Mathematics***

The emphasis in this course is upon finite differences and processes. These are compared with the infinitesimals and limiting processes of calculus. The significance of finite processes has been greatly enhanced by electronic machine computation. Machine computation and the use of these procedures in treating topics of secondary-school mathematics are considered.

Credit: 2 semester-hours

MATHEMATICS 210. *Mathematics for Industrial Arts*

The aim of this course is to provide industrial arts students with an understanding of the mathematics needed in solving mensuration problems and such problems as may arise in a machine shop, woodworking, automobile mechanics, or the study of electricity. Topics include common and decimal fractions, exponents, equations, the use of vernier measuring devices, the use of formulas, slide rules, mathematical tables, logarithms, the solution of linear and quadratic equations, the use of simple relations in plane and solid geometry, and elementary trigonometry.

Credit: 2 semester-hours

MATHEMATICS 211. *Difference Equations*

This course is intended to acquaint the student with the elementary concepts of difference equations. Applications are taken primarily from economics, psychology, and sociology. Among the topics included are: the amortization of debts, the growth of national income, pure inventory cycles, the Bush-Mosteller probability model for simple learning, and the Weber-Fechner Law governing stimulation and response.

Credit: 2 semester-hours

MATHEMATICS 215. *Methods of Computation*

This course gives the student an opportunity to become proficient in the use of the slide rule and the desk calculator. The major portion of the course is devoted to developing skill in the use of the slide rule. Students meet once a week for two hours during the semester. At least one hour of each double period is devoted to supervised drill in the use of the slide rule or desk calculator.

Credit: 1 semester-hour

THE THIRD YEAR

In the first semester, courses in *An Introduction to Mathematical Statistics* and *Higher Algebra* are required. The algebra course provides the student with preparation and confidence for the teaching of algebra in the high school. Foundations of algebra are introduced.

Modern College Geometry is required in the second semester. In this course the student learns more powerful methods and techniques for solving original

exercises in geometry and gains experience in the construction of geometric proofs by analysis. Foundations of geometry are introduced.

Professionalization during this year is emphasized by increased demands on the student in making lucid explanations, and in ability to anticipate difficulties in teaching procedures. He now begins to participate actively in the classes in the College High School as an assistant and is expected to help in diagnosing pupil difficulties and in providing remedial practice.

MATHEMATICS 300. *The Social Uses of Mathematics*

For a description of this course, see page 54.

Credit: 2 semester-hours

MATHEMATICS 301. *Modern College Geometry*

This course gives the student a thorough preparation for teaching geometry. Synthetic and coordinate methods for solving problems are carefully analyzed and applied. There is an intensive review of the content and structure of high-school geometry. Most of the course is concerned with advanced topics of Euclidean geometry, the foundations of geometry, non-Euclidean geometry, projective and affine geometries, and topology.

Credit: 4 semester-hours

MATHEMATICS 302. *Higher Algebra*

The principal aim of this course is to develop an understanding of the fundamental concepts of algebra. Topics covered include the language of sets, development of the complex number system starting from Peano's postulates for the natural numbers, algebraic structures, basic results in the theory of numbers, the theory of polynomials, elements of the theory of equations, matrices, and determinants.

Credit: 4 semester-hours

MATHEMATICS 304. *Solid Geometry*

This course is a study of the usual topics of solid geometry from a modern point of view. Topics included are: the axioms of solid geometry and the principle of duality; lines, planes, and angles in space; orthogonal projection; solids generated by parallel projection and by central projection; wedge-shaped and prismatic solids; and solids with central and axial symmetry. Modifications in the teaching of geometry, as suggested by recent curriculum study groups, are discussed.

Credit: 2 semester-hours

MATHEMATICS 307. *An Introduction to Mathematical Statistics*

This first course covers the usual topics in statistics, using calculus as a major tool in the derivation of formulas. Topics included are: types of data and types of measurement; attributes and variables; graphical representation; measures of central tendency and dispersion; moments; binomial, Poisson, and normal dis-

tributions; linear regression and correlation; elements of sampling theory and statistical inference. This course is required of mathematics majors in lieu of MATHEMATICS 400.

Credit: 3 semester-hours

MATHEMATICS 308. *The Teaching of Junior High School Mathematics*

Most of the content of MATHEMATICS 300 is covered in this course, but its chief function is to present those techniques and methods of procedure which can be used successfully in the teaching of junior high school mathematics. Recent experimental text materials are examined. Observation and participation in the teaching of certain units in junior high school classes are required.

Credit: 2 semester-hours

ELECTIVE

MATHEMATICS 310. *An Introduction to Mathematics*

This course is designed for students whose major interests are in fields other than mathematics and science. Fundamental concepts and applications of mathematics are stressed rather than formal manipulative techniques. Topics considered include: logic, the evolution of the number system, the algebra of sets with applications to social science, probability and the theory of games, systems of notation, and mathematical systems.

Credit: 2 semester-hours

THE FOURTH YEAR

In the fourth year the course in *Applications of Mathematics* gives the future teacher an effective background in the use of precision instruments. The course in the *Teaching of Mathematics in Secondary Schools* coordinates and brings to a focus all of the professionalization of his previous courses. Here his attention is concentrated solely on a careful study of the teaching of mathematics in secondary schools. He becomes acquainted with the literature of the teaching of mathematics and with discussions by leading teachers in mathematical periodicals. In supervised student-teaching the student puts into practice, under expert direction and supervision, in high-school classes, the theories and methods he has studied. Thus, we have the combination of sound scholarship in mathematics and an apprenticeship under successful high-school teachers.

MATHEMATICS 400. *Educational Statistics*

For a description of this course, see page 54.

Credit: 2 semester-hours

MATHEMATICS 401. *The Teaching of Mathematics in Secondary Schools*

The techniques of teaching different units of work in the secondary school are studied, and the application of these techniques in a demonstration class is observed by the student. Current curricular trends and proposals are examined. Each

student participates in organizing and preparing teaching material; in conducting class activities; in constructing, administering, and evaluating tests; in tutoring; and in other teaching activities.

Credit: 3 semester-hours

MATHEMATICS 401X. *The Teaching of Mathematics in Secondary Schools*

This is a service course offered to students seeking to meet state certification requirements. It also serves as a refresher course in methods of teaching high-school mathematics. The course content is equivalent to that of MATHEMATICS 401.

Credit: 2 semester-hours

MATHEMATICS 402. *Applications of Mathematics*

This course deals with the use of instruments in precision measurements to supply adequate information and teaching techniques for various phases of junior and senior high school mathematics. The course also includes computational work using a slide rule, abacus, and desk calculator. Electronic computers are discussed. Applications of mathematics in other areas are considered.

Credit: 3 semester-hours

MATHEMATICS 404. *Modern Mathematical Literature*

An important objective of this course is to help the student to integrate the work of his four years as a mathematics major and to relate this work to his chosen profession of teaching secondary-school mathematics. Attention is given to the development of important concepts of modern mathematics as well as to proposals for including certain aspects of these in the curricula of the schools. The student is expected to become familiar with recent literature in the field.

Credit: 2 semester-hours

ELECTIVES

MATHEMATICS 405. *History of Mathematics*

This course constitutes a survey of the history of elementary mathematics, through calculus, from ancient times to the present day. Emphasis is placed on the major developments in the fields of arithmetic, algebra, and geometry and on the contributions of leading mathematicians. The solution of mathematical problems in their historical context is an important part of the course. A by-product is the motivating effect of historical information on the teaching and learning of mathematics.

Credit: 2 semester-hours

MATHEMATICS 406. *Solid Analytic Geometry*

This course includes a study of the basic elements of three-dimensional analytic geometry along with reference to the extensions to n dimensions. Among the topics included are: coordinates and graphs, vectors, planes and lines, appli-

cations of determinants and matrices, surfaces and curves, quadric surfaces and their classification, the general equation of the second degree, and coordinate and point transformations.

Credit: 2 semester-hours

MATHEMATICS 407. *Advanced Calculus*

The purposes of this course are twofold: Fundamental notions of calculus, such as sequences, limits, differentiation, integration, the Generalized Theorem of the Mean, partial derivatives, multiple integrals, and infinite series are rigorously developed and examined; also, some extensions of these basic concepts are introduced. In this latter set are such topics as: line integrals through Green's Theorem, Fourier series, elliptic integrals, and gamma and beta functions.

Credit: 2 semester-hours

MATHEMATICS 409. *Introduction to Contemporary Mathematics*

The aim of this course is to develop the point of view of contemporary mathematics and to consider its potential influence upon secondary-school mathematics. Special consideration is given to topics in professional literature for possible inclusion in secondary-school mathematics. Such topics include sets, Boolean algebra, a modern concept of variable and function, a detailed study of sentences and statements, the use of symbolism and patterns in mathematics, linear programming, and the application of new mathematical techniques in the social sciences.

Credit: 2 semester-hours

MATHEMATICS 410. *Mathematics of Finance*

This course introduces the student to the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It also discusses the mathematics of life insurance covering the following subjects: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course is designed to give a helpful background to the mathematics teacher as well as to be an aid to the student of economics and insurance.

Credit: 2 semester-hours

MATHEMATICS 412. *Modern Geometry*

This course is concerned with synthetic and coordinate methods in plane and solid geometry. It is intended to provide students who have not taken MATHEMATICS 301 with a background for teaching secondary-school geometry. The course is not open to students who have received credit in MATHEMATICS 301. The structure of high-school geometry and foundations of geometry are also considered along with modern trends and proposals for secondary-school geometry.

Credit: 4 semester-hours

MATHEMATICS 415. *Differential Equations*

Various applications of differential equations and their standard methods of solution are treated in this course. Among the topics included are: linear differential equations of the first degree and of the first and higher orders, linear equations of the n th order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximation, and series solutions.

Credit: 2 semester-hours

MATHEMATICS 453. *Differential Calculus*

The basic concepts of differential calculus are developed for science students who have previously taken at least one year of college mathematics. The topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. The applications are developed utilizing the scientific background of the students. Students who have credit in MATHEMATICS 201 may not take this course for credit.

Credit: 3 semester-hours

MATHEMATICS 454. *Integral Calculus*

The basic concepts of integral calculus are developed for students who have successfully completed MATHEMATICS 453 or its equivalent. The topics include: integration procedures, solid analytic geometry, and geometrical and physical applications of the definite integral in two and three dimensional problems. The applications are developed utilizing the scientific background of the students. Students who have credit in MATHEMATICS 202 may not take this course for credit.

Credit: 3 semester-hours

MATHEMATICS 480. *Elements of Logic*

This course is intended to help the students develop an understanding of the methods of reasoning used in the mathematical sciences. The point of view and elementary processes of symbolic logic are studied. Background materials are included for the teaching of logical concepts in secondary schools.

Credit: 2 semester-hours

THE DEPARTMENT OF MUSIC

The Department of Music offers a twofold program:

1. A major in music education for students who wish to teach music in grades one through twelve.
2. Music courses as cultural background for students who intend to teach academic subjects in the secondary schools.

The Music Major

The music major prepares the student to teach vocal or instrumental music, music appreciation, and music theory in the elementary and secondary schools.

The curriculum includes four areas of subject-matter; music history and appreciation, music theory, applied music, and music pedagogy. Music majors pursue the same core curriculum throughout the freshman and sophomore years; thereafter, they choose differentiated curricula in instrumental or vocal emphasis. By use of free electives, it is possible for the instrumental student to elect vocal emphasis, or the vocal student to elect instrumental emphasis, thereby qualifying himself to teach in both areas.

Students who wish to major in music are required to have a preliminary conference with the Chairman of the Music Department, at which time they will discuss and demonstrate their qualifications for specialization in this field. Prospective music majors should have performance ability of promise on a primary and secondary instrument, good musicality, a knowledge of elementary music theory, and give evidence of serious music study throughout the high-school years.

Instrumental primary students are urged to participate in choral organizations in high school; voice primary students are urged to study piano throughout the four years in high school. Two years of a language are required for entrance to the music major.

MUSIC MAJOR—INSTRUMENTAL EMPHASIS

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Sci. 100A <i>Physical Science or</i>	
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100B <i>Biological Science</i>	4
Ed. 100 <i>Mental Hygiene & Personal Adj.</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
MUS. 101 <i>SIGHT READING & EAR TRAINING (3)</i>	2	MUS. 102 <i>SIGHT READING & EAR TRAINING (3)</i>	2
MUS. 103 <i>PRIMARY INSTRUMENT, I.</i>	1	MUS. 104 <i>PRIMARY INSTRUMENT, II</i>	1
MUSIC 105A <i>SECONDARY INSTRUMENT, I</i>	½	MUS. 105B <i>SECONDARY INSTRUMENT, II</i>	½
	<hr/> 17		<hr/> 16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i> ..	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Development & Behavior, I</i>	3	Ed. 202 <i>Human Development & Behavior, II</i>	3
MUS. 201 <i>HARMONY, I</i>	3	Elective	2
MUS. 203 <i>PRIMARY INSTRUMENT, III</i>	1	MUS. 202 <i>HARMONY, II</i>	3
MUS. 205A <i>STRING INSTRUMENTS, I (2)</i>	1	MUS. 204 <i>PRIMARY INSTRUMENT, IV</i>	1
MUS. 207 <i>EPOCHS IN MUSICAL DEVELOPMENT, I</i>	2	MUS. 208 <i>EPOCHS IN MUSICAL DEVELOPMENT, II</i>	2
MUS. 210A <i>SECONDARY INSTRUMENT, III</i>	½	MUS. 210B <i>SECONDARY INSTRUMENT, IV</i>	½
ENSEMBLE	1	ENSEMBLE	1
	<hr/> 15	MUS. 206A <i>WOOD WIND INSTRUMENTS (2)</i>	1
			<hr/> 17

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus)....	3
Elective Humanities (free elective—1)	2	Lang. 300 <i>Foundations of Language</i> ..	2
Elective	2	MUS. 205B STRING INSTRUMENTS, II (2)	1
MUS. 303 PRIMARY INSTRUMENT, V	1	MUS. 304 PRIMARY INSTRUMENT, VI	1
MUS. 306A SCHOOL ORCHESTRAS	2	MUS. 305 ORCHESTRATION	2
MUS. 307 FORM & ANALYSIS	2	MUS. 306B SCHOOL BANDS	2
MUS. 309 BRASS WIND INSTRUMENTS (2)	1	MUS. 308 VOICE CLASS FOR INSTRUMENTALISTS	1
ENSEMBLE	1	ENSEMBLE	1
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 4— Education Elective	3
Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5	Eng. 100G <i>Western World Literature</i>	3
Elective	2	Math. 400 <i>Educational Statistics</i>	2
MUS. 206B PERCUSSION INSTRUMENTS (2)	1	Elective— <i>Mathematics or Science</i>	2
MUS. 401 METHODS OF TEACHING MUSIC IN SECONDARY SCHOOLS....	3	Electives	5
MUS. 402A PRIMARY INSTRUMENT, VII	$\frac{1}{2}$	MUS. 402B PRIMARY INSTRUMENT, VIII	$\frac{1}{2}$
ENSEMBLE	$\frac{1}{2}$	ENSEMBLE	$\frac{1}{2}$
	15		16

Total: 128 semester-hours

MUSIC MAJOR—VOCAL EMPHASIS

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i> ..	3	Speech 100D <i>Fundamentals of Speech</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Sci. 100A <i>Physical Science or</i>	4
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100B <i>Biological Science</i>	4
Ed. 100 <i>Mental Hygiene & Personal Adj.</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
MUS. 101 SIGHT READING & EAR TRAINING (3)	2	MUS. 102 SIGHT READING & EAR TRAINING (3)	2
MUS. 103 PRIMARY INSTRUMENT, I	1	MUS. 104 PRIMARY INSTRUMENT, II	1
MUS. 105A SECONDARY INSTRUMENT, I	$\frac{1}{2}$	MUS. 105B SECONDARY INSTRUMENT, II	$\frac{1}{2}$
	17		16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Development & Behavior, I</i>	3	Ed. 202 <i>Human Development & Behavior, II</i>	3
MUS. 201 HARMONY, I	3	Elective	2
MUS. 203 PRIMARY INSTRUMENT, III	1	MUS. 202 HARMONY, II	3
MUS. 205A STRING INSTRUMENTS, I (2)	1	MUS. 204 PRIMARY INSTRUMENT, IV	1
MUS. 207 EPOCHS IN MUSICAL DEVELOPMENT, I	2	MUS. 208 EPOCHS IN MUSICAL DEVELOPMENT, II	2
MUS. 210A SECONDARY INSTRUMENT, III	½	MUS. 210B SECONDARY INSTRUMENT, IV	½
ENSEMBLE	1	ENSEMBLE	1
	15	MUS. 205B STRING INSTRUMENTS, II (2)	1
			17

JUNIOR YEAR

Ed. 303 <i>The Teacher in School and Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus)	3
Elective Humanities (free elective/1)	2	Eng. 100G <i>Western World Literature</i>	3
MUS. 301 CHORAL TECHNIQUE	2	Lang. 300 <i>Foundations of Language</i> ..	2
MUS. 303 PRIMARY INSTRUMENT, V	1	MUS. 304 PRIMARY INSTRUMENT, VI	1
MUS. 307 FORM & ANALYSIS	2	MUS. 305 ORCHESTRATION	2
MUS. 310A SECONDARY—PIANO	½	MUS. 310B SECONDARY—PIANO	½
MUS. 320 TEACHING MUSIC IN THE ELEMENTARY SCHOOL	3	ENSEMBLE	1
ENSEMBLE	1		15½
	16½		

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 4— <i>Education Elective</i>	3
Ed. 403 <i>Student Teaching</i> (6 weeks off campus)	5	Math. 400 <i>Educational Statistics</i>	2
Elective	2	Elective—Mathematics or Science	2
MUS. 401 METHODS OF TEACHING MUSIC IN SECONDARY SCHOOLS ..	3	Electives	7
MUS. 402A PRIMARY INSTRUMENT, VII	½	MUS. 402B PRIMARY INSTRUMENT, VIII	½
MUS. 429 A CAPPELLA CHOIR & CHORAL CONDUCTING	2	ENSEMBLE	½
ENSEMBLE	½		15
	16		

Total: 128 semester-hours

Applied Music

Music majors will choose a primary and a secondary instrument in applied music, one of which shall be piano. Other primary instruments may be organ, voice, violin, or other band and orchestra instruments. The primary instrument represents the student's greatest talent and accomplishment; the secondary instrument, lesser talent and accomplishment. Every music major will give a graduation recital on his primary instrument in the senior year. Students receive a one-hour private lesson on the primary instrument and a half-hour private lesson (or equivalent class lesson) on the secondary instrument each week.

All music students will study with the applied music teachers provided by the College.

Entrance Requirements in Primary Instruments

1. Piano

- a. Play from memory all major and harmonic minor scales, four octaves, hands together and I, IV, and V chords inversions in each key.
- b. A little prelude or two part invention by J. S. Bach.
- c. An easy sonata by Haydn, Mozart, or Beethoven, played from memory.
- d. A composition by a Romantic or modern composer of the student's choice.

2. Voice

- a. A good natural voice above the average in quality and range; good intonation and clear diction.
- b. Two songs of the student's choice selected from standard voice repertory, such as a simple art song, an air from an oratorio, or an aria from an opera, one of which shall be sung in English.
- c. A minimum of two years of piano study.
- d. Knowledge of French or German is recommended.

3. Violin

- a. Play from memory all major and melodic minor scales, three octaves.
- b. An etude selected from Dont. Op. 37 or Kreutzer, Number 2-20, or equivalent.
- c. A first movement selected from the following concertos: Viotti, Numbers 22, 23; DeBeriot, Number 9; or Vivaldi, A minor; or two movements from a sonata by Handel, Corelli, or Tartini.
- d. A composition chosen by the student from the classic repertory.

4. Clarinet

- a. Play from memory all major and melodic minor scales, three octaves, moderate tempo.
- b. Completion of a substantial portion of one of the standard clarinet methods: Baermann, Lazerus, Langenous, Klose, or equivalent.
- c. An etude chosen from Baermann, Bk. IV, characteristic studies, Klose, or equivalent.
- d. A composition chosen by the student from the classic repertory.

5. Trumpet or Cornet

- a. Play from memory without music, all major, and melodic minor scales, two octaves where possible.
- b. Completion of a substantial portion of Arban's Method for the Trumpet or equivalent.
- c. An etude chosen from the Twelve Characteristic Etudes, Arban.
- d. A composition chosen by the student from the classic repertory.

Entrance requirements for other primary instruments may be had upon request.

Entrance Requirements in Piano, Secondary Instrument

1. Evidence of the satisfactory completion of John Thompson's *Modern Course for the Piano, First and Second Grade Books*, or equivalent.
2. All major scales, sharps and flats, hands together, played from memory.
3. Two of the following compositions played from memory:
 - a. Minuet in G, Bach, *Classics Albums, Book I*, B. F. Wood Music Company.
 - b. Sonatina in C, Op. 36, No. 1, Clementi, first movement.
 - c. Melody, Schumann, *Classics Albums, Book I*.

This requirement represents at least one year of serious music study.

Entrance requirements for the other secondary instruments may be had upon request.

A student will be admitted with a condition in his secondary instrument provided he has compensatory performance abilities on other instruments. A condition on the secondary instrument, however, must be removed during the first year. A student will not be permitted to enter the sophomore year until the condition has been removed. Instruction on sub-credit bearing secondary instruments will be taken at the student's expense and from approved teachers.

All instruction in applied music taken during the summer session and all instruction required to make up failures in applied music will be taken at the student's expense.

STUDENT TEACHING

Music majors will do four weeks of student teaching in grades one through six in the spring semester of their junior year, and six weeks of student teaching in grades seven through twelve in the fall semester of their senior year. Experience is given in teaching both vocal and instrumental music.

ENTRANCE REQUIREMENTS FOR STUDENT TEACHING

I. For Junior Student Teaching

Regardless of vocal or instrumental emphasis, all music majors are required to complete MUSIC 210B, *Secondary Piano*, before they enter junior student teaching and, in addition, to meet the following minimum performance standards with an average grade of not less than C:

- A. Give evidence of a working knowledge of practical keyboard harmony; ability to harmonize and transpose a simple melody; chord with primary chords in any major or minor key.
- B. Sing and play five folk songs suitable for use in the elementary grades.
- C. Play four community songs, two of which shall be "America" and "America the Beautiful" from memory.

II. For Senior Student Teaching

Regardless of vocal or instrumental emphasis, all music majors are required to meet the following minimum requirements in Secondary (piano) with an average of not less than C:

- A. Play an easy selection on any instrument other than the primary or secondary instrument.
- B. Play at sight a song suitable for use in the junior high school.
- C. Play six community songs, three of which shall be "America," "America the Beautiful," and "The Star Spangled Banner" from memory.

MUSIC SCHOLARSHIPS

See scholarships, page 43.

ENSEMBLE

All music majors participate in the ensemble of the primary instrument through the four years. Regardless of the primary instrument, all music majors participate in choral organizations during the freshman and sophomore years. Thereafter, they may elect membership in other organizations. However, credit will not be given for more than two consecutive semesters in any organization. Ensemble credit is not given for the freshman year. Thereafter, a maximum of five semester-hours may be earned. Students may not participate in three organizations either with or without credit without securing special permission from the Chairman of the Music Department.

Recitals

Faculty recitals and Senior Graduation recitals are given on Sunday evening in Edward Russ and Chapin Halls. Student recitals are given bi-monthly on Friday afternoons. All music students are required to perform in recitals as directed by their applied music teachers and to attend at least two-thirds of these recitals.

Music for the General Student

The cultural obligation of the teacher has long been recognized. Teacher education has become increasingly a matter of providing rich cultural backgrounds upon which the teaching of a given subject may be projected. For this reason all students except music majors are required to take MUSIC 100, Music Appreciation. In addition, the general student may elect courses in music history and literature in the junior and senior years. Whenever possible, the content of these courses is related to the student's major field.

All general students are given a music placement test. On the evidence of this test, they are advised to participate in the musical organizations of the College such as the *a cappella* choir, orchestra, band, or Opera Workshop.

Pipe Organ

The College owns two pipe organs: the great four-manual Moeller Organ in the Memorial Auditorium, and the Clarence O.S. Howe three-manual Austin Organ in Edward Russ Hall. Frequent organ concerts are given by visiting organists, faculty, and advanced organ students.

Instrument Rental

A charge of \$12.50 a semester will be made for those students who wish to rent College-owned instruments for use in instrumental classes in MUSIC 205A, 205B, 206A, 206B, and 309. The same charge will be made for rental of instruments during the summer.

THE FIRST YEAR

The student begins his career as a music major with Sight Reading and Ear Training, the primary and secondary instruments, and participates in the various musical organizations of the College.

General Education Course

MUSIC 100. *Music Appreciation*

For a description of this course, see page 53.

Credit: 2 semester-hours

Music Major Courses

MUSIC 101. *Sight Reading and Ear Training*

This course aims to develop basic skills in music reading. It includes notation and terminology, major and minor scales, intervals, triads, ear and eye recognition of commonly used tonal and rhythmic groups, and written dictation of a standard repertory of thematic materials. This course meets three hours weekly and is credited on a laboratory basis.

Credit: 2 semester-hours

MUSIC 102. *Advanced Sight Reading and Ear Training*

This course is a continuation of MUSIC 101. It includes a study of the more difficult tonal and rhythmic groups, reading parts in various clefs, harmonic ear training, and dictation. The subject-matter is taught through standard song literature, including folk and art song, choral and oratorio. This course meets three hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 101

Credit: 2 semester-hours

MUSIC 103. *Primary Instrument, Part I*

Credit: 1 semester-hour

MUSIC 104. *Primary Instrument, Part II*

Credit: 1 semester-hour

MUSIC 105A. *Secondary Instrument, Part I*

Credit: ½ semester-hour

MUSIC 105B. *Secondary Instrument, Part II*

Credit: ½ semester-hour

MUSIC 130A and B. *A Cappella Choir*

MUSIC 131A and B. *Orchestra*

MUSIC 132A and B. *Band*

The student selects two of the above organizations. Each organization meets two hours weekly.

Credit: 0 semester-hour

THE SECOND YEAR

In the second year the music major continues work on the primary and secondary instruments, begins work on string and woodwind instruments, and takes Harmony and Epochs in Musical Development.

MUSIC 201. *Harmony*

This course aims to give a practical treatment of harmony as related to the classroom. It includes a study of rhythms, intervals, primary and secondary triads, seventh chords, inversions, diatonic and chromatic progressions. Special attention is given to the functional aspects of harmony as applied to the piano keyboard in the harmonization of melodies, transposition, and improvisation of accompaniments.

Prerequisite: MUSIC 102

Credit: 3 semester-hours

MUSIC 202. *Advanced Harmony*

This course is a continuation of MUSIC 201. It includes a study of foreign chords, altered chords, modulation, enharmonic tones, and the rhythmic and harmonic principles of musical form. Application is made in four-part writing, in harmonic analysis, and on the piano keyboard.

Prerequisite: MUSIC 201

Credit: 3 semester-hours

MUSIC 203. *Primary Instrument, Part III*

This course is a continuation of MUSIC 104.

Credit: 1 semester-hour

MUSIC 204. *Primary Instrument, Part IV*

Credit: 1 semester-hour

MUSIC 205A. *String Instruments, I*

This course develops elementary playing skills on string instruments. The violin is the basic instrument for this course for all students who have not had previous string experience. The materials and methods used are those recommended in the teaching of these instruments in the classroom. Special attention is given to various problems likely to occur in the organization of beginning string classes in the public school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 102

Credit: 1 semester-hour

MUSIC 205B. *String Instruments, II*

This course is a continuation of MUSIC 205A. It aims to develop string playing beyond elementary level and includes the higher positions, bowing techniques, and vibrato. Opportunity is given to the student to become familiar with the viola, cello, and double bass. Students learn a repertory of folk song and elementary ensemble pieces suitable for grade school use. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 205A

Credit: 1 semester-hour

MUSIC 206A. *Woodwind Instruments*

This course develops elementary playing skills on the clarinet, flute, oboe, and other woodwind instruments. The materials and methods used are those recommended in the teaching of these instruments in the classroom. Special attention is given to the various problems likely to occur in the organization of the beginning woodwind classes in the public school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 206B. *Percussion Instruments*

This course develops elementary playing skills on the snare drum, bass drum, tympani, cymbals, bells, etc. The materials and methods are those recommended in the teaching of these instruments in the classroom. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 207. *Epochs in Musical Development, Part I*

This course makes a study of the medieval and polyphonic epochs in musical development. It deals with music in Greek culture, music of the early Christian Church, secular music makers of the Middle Ages, music of the Renaissance, the rise of instrumental music, and the growth of choral polyphony culminating in the works of Bach and Handel. Students make a chronological chart showing parallel developments in music, art, literature, and history.

Credit: 2 semester-hours

MUSIC 208. *Epochs in Musical Development, Part II*

This is a continuation of MUSIC 207, and makes a study of the classic and early romantic epochs in musical development. It includes study of the music of Haydn, Mozart, Beethoven, Schubert, Schumann, Brahms, Berlioz, and Liszt. This course is professionalized for use in teaching music appreciation in the classroom.

Credit: 2 semester-hours

MUSIC 210A. *Secondary Instrument, Part III*

This is a continuation of MUSIC 105B.

Credit: ½ semester-hour

MUSIC 210B. *Secondary Instrument, Part IV*

Credit: ½ semester-hour

MUSIC 230A and B. *A Cappella Choir***MUSIC 231A and B. *Orchestra*****MUSIC 232A and B. *Band*****MUSIC 233A and B. *Music Workshop***

MUSIC 234A and B. *Opera Workshop*

The student selects two of the above organizations. Each organization meets two hours weekly and is credited on a laboratory basis.

Credit: $\frac{1}{2}$ semester-hour each

THE THIRD YEAR

The first two years of the music major curriculum have been devoted primarily to developing skills in applied music and to pursuing sequential courses in music theory and history. In the third year the skills and knowledge thus gained are applied in professionalized subject-matter courses in choral and instrumental school music. Junior music majors go out for one week of observation in the elementary schools in the first semester, and for four weeks of student teaching in grades 1-6 in the second semester.

MUSIC 301. *Choral Technique*

This course aims to develop the voice of the student through the singing of choral material suitable for use in the high school. It includes a study of the principles of tone production, diction, phrasing, and interpretation, illustrations of which are made in graded song materials for various vocal combinations. Special attention is given to testing and classification of voices, balance of parts, rehearsal routine, accompaniment playing, and conducting. This course includes observation and participation in the College High School Chorus.

Prerequisite: MUSIC 202

Credit: 2 semester-hours

MUSIC 303. *Primary Instrument, Part V*

This course is a continuation of MUSIC 204.

Credit: 1 semester-hour

MUSIC 304. *Primary Instrument, Part VI*

Credit: 1 semester-hour

MUSIC 305. *Orchestration*

This course makes a study of the range, tuning, transposition, and use of all instruments in the orchestra and band. It includes practical arranging for various combinations of instruments and the completion of a full score for band or orchestra. Special attention is given to the playing and transposition of parts at the keyboard.

This course includes observation in the College Orchestra and the College Band.

Prerequisites: MUSIC 205A, 205B, and 206A

Credit: 2 semester-hours

MUSIC 306A. *School Orchestras*

This course deals with the organization of school orchestras; the selection, purchase, and care of instruments; tuning procedures; rehearsal techniques; substitution of instruments; elementary conducting; and evaluation of materials. Students learn a repertory of music suitable for use in school orchestras. This course includes off-campus observation of current practices in school orchestras.

Prerequisites: MUSIC 205A and 205B

Credit: 2 semester-hours

MUSIC 306B. *School Bands*

This course deals with the organization of school bands; the selection, purchase, and care of instruments; rehearsal routine; substitution of instruments; elementary conducting; and marching band. Students learn a repertory of music suitable for use in school bands. This course includes off-campus observation of current practices in school bands.

Prerequisite: MUSIC 206A

Credit: 2 semester-hours

MUSIC 307. *Music Form and Analysis*

This course provides application of all branches of music, theory, history, and performance in the analysis of vocal and instrumental forms. It includes a study of two and three part song forms, the dance suite, rondo, variation, and sonata. The materials used in this course are selected with reference to further use in the teaching of music appreciation in the classroom.

Prerequisite: MUSIC 202

Credit: 2 semester-hours

MUSIC 308. *Voice for Instrumentalists*

This course is conducted as a laboratory class to provide instrumentalists with basic voice training. It is concerned primarily with the development of the individual voice and includes a study of the principles of tone production, breathing, diction, phrasing, and interpretation. The song material and teaching procedure used in this course are those recommended in the teaching of voice class in the senior high school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 309. *Brasswind Instruments*

This course develops elementary playing skills on trumpet, horn, trombone and other brasswind instruments. The materials and procedures used are those recommended in the teaching of these instruments in the classroom. Special attention is given to the various problems likely to occur in the organization of beginning brasswind classes in the public school. This course meets two hours weekly and is credited on a laboratory basis.

Prerequisite: MUSIC 202

Credit: 1 semester-hour

MUSIC 310A. *Secondary Instrument, Piano*

Credit: ½ semester-hour

MUSIC 310B. *Secondary Instrument, Piano*

Credit: ½ semester-hour

MUSIC 320. *Teaching Music in the Elementary School Grades, 1-6*

This course deals with the principles, materials, and methods used in teaching music in the elementary grades. It includes child voice, remedial aids for non-singers, rhythms, creative expression, discriminating listening, development of music reading, part singing, music dramatics, and the integration of music with other subjects in the curriculum. Special attention is given to the beginning choral and instrumental program in the elementary school.

Prerequisite: MUSIC 202

Credit: 3 semester-hours

MUSIC 330A and B. *A Cappella Choir*

MUSIC 331A and B. *Orchestra*

MUSIC 332A and B. *Band*

MUSIC 333A and B. *Music Workshop*

MUSIC 334A and B. *Opera Workshop*

The student selects two of the above organizations. Each organization meets two hours weekly and is credited on a laboratory basis.

Credit: ½ semester-hour each

THE FOURTH YEAR

In the first semester of the senior year the music major continues professional preparation in his field of special interest and goes out for six weeks of student teaching in grades 7-12. After student teaching, the music major returns to the campus for the second semester to carry his professional preparation still farther by electing courses in music and related fields and by giving his graduation recital.

MUSIC 401. *The Teaching of Music in Secondary Schools*

This course deals with the aims, content, and procedure in the teaching of music in the junior and senior high schools. It includes a study of general and elective music courses, extra-curricular music activities, and music for special programs. Attention is given to the coordination of the choral and instrumental program with music appreciation and music theory. Lesson plans and units of work are prepared for use in the classroom.

This course includes observation and participation in the College High School.

Prerequisite: MUSIC 320

Credit: 3 semester-hours

MUSIC 402. *Primary Instrument, Part VII and Senior Recital*

This course is a continuation of MUSIC 304.

Credit: 1 semester-hour

ELECTIVES**MUSIC 337. *The Opera***

This course makes a study of representative Italian, French, and German operas. It includes a class analysis of each opera and the illustration of its principal numbers by means of recorded music and the piano. Special attention is given to those operas presented in the junior performances at the Metropolitan Opera, New York City.

Credit: 2 semester-hours

MUSIC 338. *The Symphony*

This course makes a study of representative symphonies, orchestral suites, overtures and tone poems by classic, romantic, and modern composers. Musical illustrations are given by means of recorded music and the piano.

Credit: 2 semester-hours

MUSIC 405. *Orchestra Conducting and Score Reading*

This course aims to develop skills in orchestra conducting and score reading. It includes a study of the particular type of ear training needed in conducting, the technique of the baton, score reading, and interpretation. A special feature of this course is the presentation of a large amount of musical examples taken from standard repertory which contain practically all technical and psychological problems which face the conductor. Practical experience in conducting is given in the College High School Orchestra and the College Orchestra.

Prerequisites: MUSIC 305 and 306A or equivalent

Credit: 2 semester-hours

MUSIC 406. *Epochs in Musical Development, Part III*

This course is a continuation of MUSIC 208 and makes a study of the late romantic period and the rise of modern music. It includes a study of the music of Richard Strauss, Bruckner, Prokofieff, Mahler, Debussy, Tschaikowsky, Mussorgsky, Stravinsky, Schoenberg, Bartok, and Hindemith.

This course is professionalized for use in the teaching of music appreciation in the classroom.

Credit: 2 semester-hours

MUSIC 407. *The Development of the Opera*

This course deals with the origin, development, and characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools. The content of this course is related to the

Saturday afternoon broadcasts from the Metropolitan Opera, New York City. Special attention is given to building an ear repertory of operatic music heard over the radio.

Credit: 2 semester-hours

MUSIC 408. *Wagner Music Dramas*

This course deals with the operas and music dramas of Richard Wagner. It includes a study of Wagner's artistic ideals and their application to his compositions. Special attention is given to those works which have their sources in great literature, as the Ring of Nibelung, Parsifal, and Tristan and Isolde. This course carries field work at the Metropolitan Opera, New York City.

Credit: 2 semester-hours

MUSIC 409. *Counterpoint*

This course aims to provide a practical treatment of counterpoint for music students. It includes analysis of the works of the Sixteenth Century masters of vocal polyphony with enough of original work to insure a grasp of the principles involved. Functional aspects are stressed in the writing of inner voice parts, descant, round, and canon.

Prerequisite: MUSIC 307

Credit: 2 semester-hours

MUSIC 410. *Composition*

This course aims to develop the creative power of the student in the composition of small vocal and instrumental forms. Special attention is given to the functional aspects of composition in word setting, writing accompaniments, and improvisation. Selected compositions are performed in concert at the close of the course.

Prerequisite: MUSIC 307

Credit: 2 semester-hours

MUSIC 413. *Masters of the Symphony*

This course aims to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, and Brahms. The content of this course is related to the weekly broadcasts of the Philharmonic Symphony Orchestra of New York.

Credit: 2 semester-hours

MUSIC 414. *Modern Symphonic Forms*

This includes a study of the post-romantic symphonies of Bruckner, Mahler, Dvorak, Franck, Tschaikowsky, and Sibelius; the symphonic poems of Strauss, Smetana, and Debussy; and the orchestral suites of Rimsky-Korsakoff, Ravel, and Stravinsky. Special attention is given to building an ear repertory of symphonic music heard over the radio.

Credit: 2 semester-hours

MUSIC 416. *Music in Modern Society*

This course aims to interpret the nature, function, and forms of music in modern society in terms of the social, political, and cultural forces which have shaped it. It includes a study of the music of the church, royal patrons of music, nationalism in music, music and politics, music and industry, and music and entertainment. Because of the social interpretation given music, this course is particularly recommended to majors in the social studies.

Credit: 2 semester-hours

MUSIC 424. *A Survey of Wind Instrument Music*

This course includes music for full band, small ensembles, and solos with emphasis on literature available for brass and woodwind players in high school. A laboratory band as well as numerous small ensemble groups are formed by members of the class so that performance of all music under consideration is possible. Special attention is given the music originally composed for wind instruments. New music from all publishers is available for examination and evaluation.

Prerequisite: MUSIC 306B

Credit: 4 semester-hours

MUSIC 425. *Music of the Romantic Period*

This course deals with the romantic spirit in music as expressed in the works of Schubert, Schumann, Mendelssohn, Chopin, Berlioz, Liszt, and others. It includes a study of program music, piano and song literature, and the rise of national schools of musical composition. Representative works are studied through performance recordings, and radio listening. Special attention is given to parallel aspects of Romanticism in literature and the visual arts.

Credit: 2 semester-hours

MUSIC 426. *Survey of Music Literature*

This is a survey course in music literature and includes a study of folk song, art song, oratorio, opera, idealized dance forms, instrumental suite, sonata, symphony and symphonic poem. Abundant use of musical illustration, directed listening, and music making acquaint the student with great masterpieces of music which should be the possession of every generally cultured person. This course is designed for the general student and aims to make intelligent and appreciative consumers of music. It is a non-technical course and attempts to make intelligent and appreciative radio-listeners and concert goers. Special attention is given to the relation of music to English literature and social studies.

Credit: 2 semester-hours

MUSIC 429. *A Cappella Choir and Choral Conducting*

This course deals with the theory and practice of the *a cappella choir*. It includes a study of the principles of group tone production, phonetics as related to singing, tuning, posture, techniques of choral conducting, interpretation, and score reading. A feature of this course is the study of a selected list of choral

literature suitable for use in school, church, and community. Outstanding students are given an opportunity to conduct the College *A Cappella* Choir.

Prerequisite: MUSIC 301

Credit: 2 semester-hours

MUSIC 430A. *A Cappella Choir*

MUSIC 431A. *Orchestra*

MUSIC 432A. *Band*

MUSIC 433A. *Music Workshop*

MUSIC 434A. *Opera Workshop*

The student selects two of the above organizations. Each organization meets two hours weekly and is credited on a laboratory basis.

Credit: $\frac{1}{2}$ semester-hour each

MUSIC 460. *Musical Studies in Europe*

This field-study course gives an opportunity to study by direct observation major European musical events of the summer season together with visits to famous places in the history of music. Beginning on July 2nd the tour extends to September 3rd covering the countries of France, Germany, Austria, Switzerland, the Netherlands, and Italy. Among many other things opportunities are provided to attend the Richard Wagner Festival in Bayreuth and the Salzburg Musical Festival and to visit the musical shrines and museums in Vienna and the LaScala Opera House and museum in Milan. Famous places such as London, Paris, Rome, Florence, Venice, Amsterdam, Frankfurt, Stuttgart, and Lucerne are included in the itinerary. Students who are registered for credit are required to present a written report at the end of the trip.

Credit: 6 semester-hours

MUSIC 490. *Survey of Choral Materials for Use in Public Schools*

This course provides a survey of the choral repertoire for accompanied and a cappella groups, for changed, unchanged, changing, and mixed voices. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances, are an integral part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire. The course also includes historical and stylistic characteristics of the choral repertoire. Materials for small groups as well as the large ones are studied.

Prerequisites: MUSIC 301 and 429 or their equivalents

Credit: 2 semester-hours

MUSIC 491. *Methods and Materials for Teaching Woodwind Instruments*

This course covers the pedagogy of all the woodwind instruments: flute, oboe, clarinet, bassoon, and saxophone. Attention is given to the problems of teaching

individual students and to class procedures. Demonstration lessons, with criticism by instructor and students are provided. Woodwind literature is presented in all aspects, including study materials, solos, and ensemble music. Equipment is studied with reference to the selection, purchase, care, and adjustment of all woodwind instruments, mouthpieces, and reeds.

Credit: 2 semester-hours

MUSIC 499A. *Problems in the Teaching of School Music*

This is a post-student teaching course. It aims to (1) evaluate student-teaching experiences; (2) give an opportunity to the student to share with his classmates the problems encountered in student teaching and to seek a possible solution for the same; (3) meet shortages in teacher preparation not provided for in previous courses; (4) give the student a unified view of school-music education before he enters the teaching field. The content of this course is determined largely by the expressed needs of the students.

Credit: 2 semester-hours

MUSIC 499B. *Workshop in School Music*

This course is designed primarily for music teachers-in-service who wish to work out projects for use in their respective schools. The content of this course is determined by needs in the field. It may include folk-song dramatizations, small vocal and instrumental ensembles, the integration of music with other subjects in the curriculum, music for boys, visual aids in music pageants, festivals, and materials for special programs. This course provides the teacher with a number of units of work suitable for classroom use.

Credit: 2 semester-hours

PANZER SCHOOL OF PHYSICAL EDUCATION AND HYGIENE

History

Panzer College of Physical Education and Hygiene was founded in September 1917. Its inception followed passage of The Pierson Act, a law which made physical education compulsory in the public schools of the State. The founders were men and women interested in a program of teacher-education to provide instructors in physical training and hygiene for the public schools.

Established in Newark—where it was known as the Newark Normal School of Physical Education and Hygiene—the institution offered a two-year course for men and women planning to teach physical education and hygiene.

In 1919 the Board of Trustees named Henry Panzer President. In 1926, the school was relocated in East Orange. In 1928, the State Board of Education approved a four-year course and authorized the College to grant the degree of Bachelor of Physical Education. In the same year, the name was changed to Panzer College of Physical Education and Hygiene. In 1939, the State Board authorized the conferral of the degree of Bachelor of Science in Education.

The College functioned under the direction of a seven-member board of

trustees. An active alumni association and an auxiliary-patrons association provided support for the program and activities of the institution.

From 1921 through the academic year, 1957-1958, Dr. Margaret C. Brown served as College president. An outstanding leader, Dr. Brown is the recipient of many awards from local and national organizations in the field of health, recreation, and physical education.

In 1958—when Panzer realized the need for increasing the number of physical education teachers but could not expand its facilities—the Board of Trustees of the College requested that the Panzer program be incorporated with that of Montclair State College. The State Board—recognizing the fact that Montclair offered a minor in physical education and that a new gymnasium had recently been completed on its campus—deemed the request “in the best interests of the educational program of the State.” Therefore, on February 5, the State Board adopted a resolution stipulating that, effective August 1, 1958, Panzer College be consolidated with Montclair State College.

As a result of the merger, Panzer College became the Panzer School of Physical Education and Hygiene at Montclair State College. All Panzer students in good academic standing became eligible for transfer and matriculation. The Panzer library, laboratory, and academic equipment were moved to the Montclair campus.

The School of Physical Education and Hygiene functions as a regular department of the College. Students transferring from Panzer follow a program based on (1) courses already completed at Panzer, and (2) requirements in general and professional education of the Montclair curriculum adapted to the needs of the students who are transferred.

Physical education majors admitted in September, 1958, and subsequent years will follow the curriculum prescribed for all undergraduates at Montclair.

Objectives

In addition to the general objectives and standards of the College which appear on Page 21 of this bulletin and apply fully to all students, the specific objectives of the Panzer School are as follows:

1. To provide a diversified program of high professional quality which will enable the student to develop those traits, qualities, and characteristics which will enable him to function effectively as an individual, as a teacher, and as a member of his community.
2. To supply leadership in programs of recreation for schools, camps, playgrounds, recreation centers, and other agencies.
3. To provide a well-rounded service program for all students in the College. Emphasis is placed on developing an understanding of physical education, developing skills for use in future leisure hours, and presenting those activities which provide immediate conditioning and recreational benefits.
4. To offer for all students of the College opportunities for participation in a wide variety of well-directed sports and related activities in intramural and intercollegiate competition and in sports and dance clubs.

Admission Requirements

Admission to The Panzer School follows the same pattern as that set forth for all students entering Montclair State College. There is, however, the additional provision that each student who is accepted in this specialized area must pass a battery of physical education tests. These tests are administered by the faculty and are designed to measure coordination, rhythm, and general motor ability.

Though there are no specific high school courses or activities beyond those required for general admission to the College, Panzer School applicants are advised to include chemistry and biology in their high-school program.

Broad participation in varsity sports, intramurals, and other extracurricular activities is recommended. Camping experience and participation in various kinds of recreational activities are also desirable.

College Athletics and Men's Intramurals

The College provides two athletic fields, three gymnasiums in the health, physical education, and recreation building, and an indoor archery and golf range, and other facilities for promoting sports and recreational activities. The principal sports for men normally include varsity teams in football, basketball, baseball, soccer, wrestling, track, tennis, golf, and bowling. The College is affiliated with the National Association for Intercollegiate Athletics and competes with colleges in district thirty-one of this Association. Junior varsity teams are organized in several sports and play scheduled games within the state.

The program of athletics is governed by a student-faculty council. Funds are provided by the Student Government Association from student activity fees.

Additional sports activities are available for all male students in the Men's Intramural program. Leagues are organized in basketball and softball, and tournaments are scheduled in other sports.

W. A. A.

The sport and athletic activities for women are under the direction of the Women's Athletic Association. This active student organization sponsors programs in basketball, volleyball, field hockey, soft ball, archery, tennis, badminton and fencing. Membership in these activities is open to all the women students of the college. In addition, W.A.A. sponsors a variety of experiences in intramural competition, sports days, dorm playdays, and invitation games with other colleges. Cheerleaders and twirlers are selected on a competitive basis early in the fall of the year.

Club and Team Requirement

Opportunities for participation in varsity sports, sports clubs, and intramural activities are available to all students of the College. A variety of dance clubs is also scheduled.

Students majoring in physical education are required to participate in a number of these activities to develop proficiency and learn more about them than is possible in the regular course offerings.

Camping Requirement

Each student majoring in physical education is required to attend a camp session conducted at the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest. Students attend for twelve days in June of the freshman summer and again in June of the sophomore summer.

Skills and techniques in camp programming and leadership are studied and practiced, and the program of aquatic activities can lead to Red Cross certification in swimming and life saving. Camp craft, arts and crafts, boating and canoeing, and outpost camping are among the other activities included in the program.

Gymnasium Costumes

The wearing of proper gymnasium attire is considered important, and a regulation costume is prescribed for each activity.

The costume required in physical education activities classes is purchased at the Student Supply Store on campus. The cost is approximately \$15.00 and includes a textbook and regulation lock. Under normal circumstances these items will last for the two years they are needed.

The costumes for major students include items necessary to participate in a variety of activities and are ordered by each individual. Itemized lists on order blanks are provided early enough to have the order filled in time for the opening of college. The approximate cost is \$50.00 for men and \$60.00 for women. These costumes generally last four years.

The Major Program

The courses for the major in physical education are set up in terms of the outline of requirements of the Curriculum Commission Report of 1956 as adopted by the State Board of Education. In this plan, 48 semester-hours are devoted to General Education, 15 to Basic Professional Education, 12 to Free Electives, and 53 to Specialization in Physical Education. Satisfactory completion of the approved course of study leads to certification to teach physical education in grades one through twelve.

PHYSICAL EDUCATION MAJOR PROGRAM OF COURSES FOR MEN FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Soc. St. 100A <i>Dev. of World Civilization</i> , I	3	Soc. St. 100B <i>Dev. of World Civilization</i> , II	3
Mus. 100 <i>Music Appreciation</i>	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2	Speech 100D <i>Fundamentals of Speech</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	H. Ed. 100 <i>Healthful Living</i>	2
Chem. 105 <i>Chemistry for Phys. Ed.</i> , I	3	Chem. 106 <i>Chemistry for Phys. Ed.</i> , II	3
P.E.M.100C <i>ATHLETIC GAMES & SPORTS</i> , I	1	P.E.M.100D <i>ATHLETIC GAMES & SPORTS</i> , II	1
P.E.M.100E <i>FUNDAMENTALS OF GYMNASTICS</i> , I	1	P.E.M.100F <i>FUNDAMENTALS OF GYMNASTICS</i> , II	1
P.E. 100G <i>FOLK, SQUARE & SOCIAL DANCE</i> , I	1	P.E.100H <i>FOLK, SQUARE & SOCIAL DANCE</i> , II	1
P.E. 102 <i>GRADED GROUP GAMES</i>	1		
	17		17

P.E.230 CAMPING AND OUTDOOR EDUCATION, I-1

SOPHOMORE YEAR

Soc. St. 200A <i>Contemporary American Life</i> , I	3	Soc. St. 200B <i>Contemporary American Life</i> , II	3
Ed. 201 <i>Human Development & Behavior</i> , I	3	Ed. 202 <i>Human Development & Behavior</i> , II	3
Sci. 100C <i>The Earth Sciences</i>	2	P.E. 204 KINESIOLOGY	2
BIOL. 212 MAMMALIAN ANATOMY FOR PHYS. ED.	3	BIOL. 214 PHYSIOLOGY FOR PHYS. ED.	3
P.E.M.200C ATHLETIC GAMES & SPORTS, III	1	P.E.M.200D ATHLETIC GAMES & SPORTS, IV	1
P.E. 203A INDIVIDUAL & DUAL SPORTS, I	1	Electives	3
Electives	4		15
	17		

P.E.330 CAMPING AND OUTDOOR EDUCATION, II-1

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Principles & Methods of Tchg.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
*P.E. 202 HISTORY & PRINCIPLES OF PHYS. ED.	3	Math. 400 <i>Educational Statistics</i>	2
P.E.M.309 COACHING AND OFFICIATING, I	1	P.E.M.310 COACHING AND OFFICIATING, II	1
*P.E. 201 PHYSIOLOGY OF EXERCISE	2	*P.E. 301 ADAPTED PHYSICAL EDUCATION	2
P.E. 101 ACTIVITIES & METHODS FOR ELEMENTARY GRADES	3	P.E. 203B INDIVIDUAL & DUAL SPORTS, II	1
	14	Elective— <i>Humanities</i>	2
		*Lang. 300 <i>Foundations of Language</i> ..	2
			16

* $\frac{1}{2}$ class takes this the first semester and $\frac{1}{2}$ class second semester.

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
P.E.M.203C INDIVIDUAL AND DUAL SPORTS, III	1	Ed. 4— <i>Education Elective</i>	3
P.E.405 METH. & MATERIALS OF PHYS. ED. IN SECONDARY SCHOOLS ..	4	H.Ed.M101 FIRST AID	2
P.E. 409 ORG. & ADM. OF PHYS. ED. ..	2	Elective	2
H.Ed. 401 METH. & MATERIALS IN HEALTH ED. AND SAFETY	2		15
Electives	3		
	15		

Total: 128 semester-hours

PHYSICAL EDUCATION MAJOR
 PROGRAM OF COURSES FOR WOMEN
 FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Soc. St. 100A <i>Dev. of World Civilization</i> , I	3	Soc. St. 100B <i>Dev. of World Civilization</i> , II	3
Mus.. 100 <i>Music Appreciation</i>	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2	Speech 100D <i>Fundamentals of Speech</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	H.Ed. 100 <i>Healthful Living</i>	2
Chem. 105 <i>Chemistry for Phys. Ed.</i> , I.	3	Chem. 106 <i>Chemistry for Phys. Ed.</i> , II	3
P.E.W.100C <i>ATHLETIC GAMES & SPORTS</i> , I	1	P.E.W.100D <i>ATHLETIC GAMES & SPORTS</i> , II	1
P.E.W.100E <i>FUNDAMENTALS OF GYMNASTICS</i> , I	1	P.E.W.100F <i>FUNDAMENTALS OF GYMNASTICS</i> , II	1
P.E. 100G <i>FOLK, SQUARE & SOCIAL DANCE</i> , I	1	P.E. 100H <i>FOLK, SQUARE & SOCIAL DANCE</i> , II	1
P.E. 102 <i>GRADED GROUP GAMES</i>	1		
	<hr/> 17		<hr/> 17

P.E.230 CAMPING AND OUTDOOR EDUCATION, I-1

SOPHOMORE YEAR

Soc. St. 200A <i>Contemporary American Life</i> , I	3	Soc. St. 200B <i>Contemporary American Life</i> , II	3
Ed. 201 <i>Human Development & Behavior</i> , I	3	Ed. 202 <i>Human Development & Behavior</i> , II	3
BIOL. 212 <i>MAMMALIAN ANATOMY FOR PHYS. ED.</i>	3	BIOL. 214 <i>PHYSIOLOGY FOR PHYS. ED.</i>	3
P.E.W.200C <i>ATHLETIC GAMES & SPORTS</i> , III	1	P.E.W.200D <i>ATHLETIC GAMES & SPORTS</i> , IV	1
P.E.W.200G <i>MODERN DANCE</i> , I	1	P.E.W.200H <i>MODERN DANCE</i> , II	1
P.E.W.203A <i>INDIVIDUAL & DUAL SPORTS</i> , I	1	P.E. 204 <i>KINESIOLOGY</i>	2
Electives	4	Electives	3
	<hr/> 16		<hr/> 16

P.E.330 CAMPING AND OUTDOOR EDUCATION, II-1

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Principles & Methods of Tchg.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i> ..	2	Math. 400 <i>Educational Statistics</i>	2
*P.E. 202 <i>HISTORY & PRINCIPLES OF PHYS. ED.</i>	3	*Sci. 100C <i>The Earth Sciences</i>	2
P.E.W.311 <i>COACHING & OFFICIATING</i> , I	1½	P.E.W.312 <i>COACHING & OFFICIATING</i> , II	½
*P.E. 201 <i>PHYSIOLOGY OF EXERCISE</i>	2	*P.E. 301 <i>ADAPTED PHYSICAL EDUCATION</i>	2
P.E. 101 <i>ACTIVITIES & METHODS FOR ELEMENTARY GRADES</i>	3	P.E.W.203B <i>INDIVIDUAL & DUAL SPORTS</i> , II	1
	<hr/> 15½	Elective—Humanities	2
			<hr/> 15½

* ½ class takes this first semester and ½ class second semester.

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
H. Ed. 401 METHODS & MATERIALS IN HEALTH ED. AND SAFETY	2	Ed. 4— <i>Education Elective</i>	3
P.E. 405 METHODS & MATERIALS OF PHYS. ED. IN SECONDARY SCHOOLS	4	H. Ed. W101 <i>First Aid</i>	2
P.E. 409 ORG. & ADM. OF PHYSICAL ED.	2	Elective	2
Electives	3		
	14		

Total: 128 semester-hours

The Minor Programs**Physical Education**

The minor in Physical Education is no longer offered, but certain courses can be taken as electives with approval of the chairman of the department.

Health Education

Students completing the major in physical education will have the basic courses which will permit their certification with a minor in health education.

The Required Program

All students of the College are required to complete with passing grade one semester of the course, *Healthful Living*, and four semesters of physical education activities. The two semester-hours credit allotted for physical education activities under general education are utilized by the physical education majors in skill courses required in their curriculum.

HEALTH EDUCATION 100. *Healthful Living*

For a description of this course, see page 54.

Credit: 2 semester-hours

PHYSICAL EDUCATION 100A & B. *Physical Education Activities*

The work of the freshman year consists of an orientation program whereby the students are provided with an opportunity to become acquainted with a variety of team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: ½ semester-hour each

PHYSICAL EDUCATION 200A & B. *Physical Education Activities*

The work of the sophomore year permits the student to select within a given pattern team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Credit: ½ semester-hour each

Health Education

HEALTH EDUCATION W101. *First Aid*

This is a lecture and practice course designed to acquaint the student with first-aid procedures and the prevention and care of accidents or sudden illnesses which may occur on the field or in the gymnasium. Theory and practice in simple massage are also included. The appropriate Red Cross First Aid certificate is awarded upon satisfactory completion of the required material.

Credit: 2 semester-hours

HEALTH EDUCATION M101. *First Aid*

This is a lecture and practice course designed to acquaint the student with first aid procedures and the prevention and care of accidents or sudden illnesses which may occur on the field or in the gymnasium. The appropriate Red Cross First Aid Certificate is awarded to those who successfully complete the requirements of the course.

Credit: 2 semester-hours

HEALTH EDUCATION 207. *Safety Education*

Opportunities are presented for acquiring knowledge and skills related to safety in the school buildings, on the school grounds, and going to and from school.

Credit: 2 semester-hours

This course is an elective available to all students of the College.

HEALTH EDUCATION 401. *Methods and Materials in Health and Safety Education*

This course considers teaching techniques which are most effective in the areas of health and safety. A survey and study of various health materials, textbooks, audio-visual aids, and other materials are also undertaken.

Credit: 2 semester-hours

HEALTH EDUCATION 407. *Prevention and Care of Athletic Injuries*

This is a lecture and laboratory course designed to acquaint the student with ways to prevent and care for the common injuries sustained in athletics. Attention is given to sprains, strains, bruises, burns, and fractures. The responsibility of the coach is emphasized in caring for injuries. This course is a recommended elective for men physical education majors.

Prerequisite: H.E. M101. *First Aid*

Credit: 2 semester-hours

HEALTH EDUCATION 408. *Driver Education*

PART I

This part consists of a minimum of 40 hours of class recitations and discussions for which home reading and study have been assigned. The following

topics are included: (1) history and development of driver education and training programs; (2) objectives of driver education; (3) local, state, and national traffic safety programs; (4) driver qualifications; (5) psychophysical testing; (6) curricular content of school courses in driver education and training; (7) construction, operation, and maintenance of automobiles; (8) traffic laws and driver licensing; (9) traffic engineering; (10) pedestrian education and protection; (11) equipment for teaching driver education; (12) liability, costs, and insurance; (13) planning driver education as a part of the daily program of the high school; (14) public relations; (15) records and reports; and (16) visual aids in teaching driver education.

PART II

This part consists of a minimum of 20 hours devoted to the following: (1) behind-the-wheel instruction; (2) demonstrations and student-teacher practice in the car; and (3) road tests in traffic. Home reading and study are required in preparation for these projects.

Prerequisite: Driver's license with three years of driving experience with satisfactory driving record

Credit: 3 semester-hours

HEALTH EDUCATION 411. *School Health Services*

The student is familiarized with the health services available in the school. The part which the teacher plays in coordinating his activities with the school medical staff is emphasized.

Prerequisite: H.E. 100. *Healthful Living*

Credit: 2 semester-hours

HEALTH EDUCATION 412. *Alcohol Education Workshop*

This is a workshop course offered with the cooperation of the State Department of Health and aimed at preparing teachers of health, school nurse teachers, guidance personnel, and others, for more understanding service in this special area of education. The workshop concentrates on a careful study of the physiological, sociological, and psychological problems involved in the use of beverage alcohol and on the materials, sources, and techniques found to be most useful in alcohol-education programs.

Credit: 2 semester-hours

Physical Education

PHYSICAL EDUCATION M100C & D. *Athletic Games and Sports, I and II*

This is an introduction to the history, theory, skills, techniques, and achievement tests in soccer, track and field, basketball, volleyball, football, and softball for men.

Credit: 2 semester-hours

PHYSICAL EDUCATION W100C & D. *Athletic Games and Sports*, I and II

Learning experiences for women are provided in skills and techniques of field hockey, soccer, basketball, volleyball, softball, and track and field. Rules and some officiating techniques are considered. Leadership traits, proper attitudes, and professional ideals are developed along with an appreciation of skill in these sports.

Credit: 2 semester-hours

PHYSICAL EDUCATION 100E & F. *Fundamentals of Gymnastics*, I and II

Various forms of gymnastics are taught, including free-standing calisthenics, heavy apparatus, and tumbling. These activities are considered in terms of proper sequence and grading for use in the school program. Safety measures and teaching techniques are also considered.

Credit: 2 semester-hours

PHYSICAL EDUCATION 100G & H. *Folk, Square, and Social Dance*, I and II

The prospective teacher learns the basic skills, teaching methods, and materials necessary to organize and teach these forms of dance. Standards for social conduct are discussed and experiences provided to employ the social techniques.

Credit: 2 semester-hours

PHYSICAL EDUCATION 101. *Activities and Methods for the Elementary Grades*

This course covers materials and methods of teaching for the elementary school. Activities include story plays, mimetics, rhythmic activities, gymnastics with hand apparatus, tumbling stunts, marching, and creative activities. The course also includes a study of the characteristics of the elementary school child in relation to his physical education needs; the organization of physical education activities into teaching units and plans; and a review of courses of study and curricula for the various age groups.

Prerequisite: P.E.102. *Graded Group Games*

Credit: 3 semester-hours

PHYSICAL EDUCATION 102. *Graded Group Games*

Elementary group games, team games of low organization, and individual and group recreative games are taught. The relationship between children's capacities and needs, and class organization, are also included.

Credit: 1 semester-hour

PHYSICAL EDUCATION M200C & D. *Athletic Games and Sports*, III and IV

This course concerns itself with the teaching methods, theory, skill testing, and conditioning procedures for soccer, basketball, football, and baseball for men.

Prerequisite: P.E.M100C & D. *Athletic Games and Sports*, I and II

Credit: 2 semester-hours

PHYSICAL EDUCATION W200C & D. *Athletic Games and Sports*, III and IV

Students are provided opportunities for further skill development and participation in sports for women. Planned teaching experiences are included in basketball, volleyball, softball, track and field, and other appropriate activities. Skills and techniques in coaching, officiating, and administration of skill tests are also developed.

Prerequisite: P.E.W100C & D. *Athletic Games and Sports*, I and II

Credit: 2 semester-hours

PHYSICAL EDUCATION W200G & H. *Fundamentals of Modern Dance*, I and II

An introduction to the techniques and composition of modern dance is provided in this course. Attention is given to developmental exercises, the relationship of movement and sound patterns, and group improvisation as a means of approaching dance composition.

Credit: 2 semester-hours

PHYSICAL EDUCATION 201. *Physiology of Exercise*

This course deals with the physiological effects of activity upon the human organism; the reaction of exercises of speed, strength, and endurance upon the circulatory, respiratory, and muscular systems; and the causes of fatigue, staleness, and exhaustion.

Prerequisites: BIOL. 212. *Mammalian Anatomy for Physical Education* and BIOL. 214. *Physiology for Physical Education*

Credit: 2 semester-hours

PHYSICAL EDUCATION 202. *History and Principles of Physical Education*

The history and development of physical education are traced from primitive man to modern times. Influences which have contributed to the development of the modern philosophy of physical education are identified.

Principles of physical education are studied in the light of scientific foundations, aims and objectives, and the place of physical education in the total educational program. The problems of social and moral training, wise use of leisure time, and total fitness are also considered. This course may not be taken until the junior year.

Credit: 3 semester-hours

PHYSICAL EDUCATION 203A, B, AND C. *Individual and Dual Sports*

Parts A and B of this course are coeducational while part C is offered for men only. The history, rules, skills, and teaching techniques and progression are presented in the following sports: archery, badminton, bowling, fencing, golf, tennis, track and field, and wrestling (for men only).

Credit: 1 semester-hour each

PHYSICAL EDUCATION 204. *Kinesiology*

A scientific study of human movement and its relationship to anatomical structure is undertaken. The course includes the principles of mechanics of underlying motor skills, and the application of these factors to the physical education program.

Prerequisite: BIOL. 212. *Mammalian Anatomy for Physical Education*

Credit: 2 semester-hours

PHYSICAL EDUCATION 230. *Camping and Outdoor Education*

Fundamental skills in boating, canoeing, conservation, and outpost camping are taught. Students have the opportunity of earning American Red Cross swimming certificates from the beginner's level to that of Instructors in Water Safety. The theory and philosophy of camping are presented in class as well as in the general conduct of the camp session.

Credit: 1 semester-hour

PHYSICAL EDUCATION 301. *Adapted Physical Education*

This is a lecture and participation course covering the philosophy and goals of adapted physical education; for meeting the needs of children with handicaps in terms of body mechanics; body conditioning; posture programs; physical examinations; and exercises for defects. Each student is required to spend a minimum of 30 hours of clinical experience in schools, clinics, or hospitals.

Prerequisite: P.E. 204. *Kinesiology*

Credit: 2 semester-hours

PHYSICAL EDUCATION M309 AND M310. *Coaching and Officiating, I and II*

The offensive and defensive strategy of the various varsity sports is studied. A knowledge of the rules and techniques of officiating is required, and opportunities are provided for their application.

Prerequisites: P.E.M.100C & D and P.E.M.200C & D. *Athletics and Sports*

Credit: 2 semester-hours

PHYSICAL EDUCATION W311 AND W312. *Coaching and Officiating, I and II*

The fundamentals and rules of the various seasonal sports are reviewed. Emphasis is placed on the understanding of the rules, the management of games and practices, the development of officials, the adaptation of athletic activities for women and girls, and methods of teaching. Intramural games and play days supplement the course. The course covers field hockey, soccer and speedball, basketball, volleyball, softball, and track and field events.

Prerequisites: P.E.W.100C & D and W200C & D. *Athletic Games and Sports*

Credit: 1 semester-hour

PHYSICAL EDUCATION 330. *Advanced Camping and Outdoor Education*

Second year students are given advanced work in all the camping skills covered in the first year. In addition, they are given opportunities to plan programs and to have leadership assignments followed with evaluation sessions.

Prerequisite: P.E. 230. *Camping and Outdoor Education*

Credit: 1 semester-hour

PHYSICAL EDUCATION 405. *Methods and Materials of Physical Education in the Secondary Schools*

Analysis of the program of physical education in the secondary school; criteria for the selection and grade placement of activity; consideration of method and teaching techniques; construction of teaching units and lesson plans; and problems relating to program planning, time allotment, facilities, sources of materials, and measurement and evaluation in physical education constitute the content of this course. This course may not be taken until all junior-level work has been completed.

Credit: 4 semester-hours

PHYSICAL EDUCATION 409. *Organization and Administration of Physical Education*

The details of organizing the various aspects of the physical education program are discussed. Legislation, financing, excuses, plant facilities, care and purchase of supplies and equipment, office management and records, intramural programming and tournaments, and conduct of the varsity sports program are among the topics considered. This course may not be taken until all junior-level work has been completed.

Credit: 2 semester-hours

PHYSICAL EDUCATION 411. *Organization and Administration of Athletics*

The purpose of the course is to offer practical suggestions and aids for the managing of affairs of an athletic program to those who expect to become teachers, supervisors, and directors of physical education. The items discussed include athletic eligibility, management, equipment, awards, finances, budgets, safety, maintenance, planning of facilities, junior and senior high school athletics, and current athletic trends.

Credit: 2 semester-hours

PHYSICAL EDUCATION 412. *Organization and Administration of Recreation*

This course is designed to develop an understanding of the philosophy, scope, and values of recreation in our contemporary life. Program planning, suitable activities for various age levels, and publicity and promotion are discussed. There are two hours of lecture-recitation per week.

Credit: 2 semester-hours

PHYSICAL EDUCATION 413. *Social Recreation*

This course is designed to give the student materials and techniques for handling small and large groups of people in a social situation. The needs of children, teen agers, young adults, and senior citizens are considered. Materials in ice-breakers and mixers, seasonal events, active and quiet parties, skits, and dances are presented. Correct social conduct is covered and high standards of deportment set for the various activities. The class meets in one one-hour theory session and one two-hour session of activity.

Credit: 2 semester-hours

PHYSICAL EDUCATION 414. *Nature and Function of Play*

The psychological and sociological implications of play are studied and related to the growth and development of children and young people. The effect of play on society through the ages, as well as the attitudes of society toward play, are studied to evaluate play in relation to juvenile delinquency, worthy use of leisure time, and other social and psychological problems.

Prerequisite: EDUCATION 201. *Human Development and Behavior*

Credit: 2 semester-hours

PHYSICAL EDUCATION 415. *Community Hygiene*

The hygienic and health needs of a community in relation to water supply, air purification, sewage and garbage disposal, food standards, housing, disease and pest control, and other related areas are studied. Health problems are considered in the light of public health services and attention given to protective as well as corrective measures. The course is conducted through field trips, surveys, lectures, and the use of audio-visual aids.

Prerequisite: H.E. 100. *Healthful Living*

Credit: 2 semester-hours

THE DEPARTMENT OF SCIENCE

Students who are interested in preparing themselves to teach science in high school should consider carefully the present-day requirements for this kind of work. As a result of careful investigations we have extensive information concerning the activities of science teachers in secondary schools. It is not wise for a student to take work in one science only since full-time teaching positions in a single subject are seldom open to a first-year teacher. Most beginners teach two or more science subjects and often a non-science subject as part of the instructional load. It is, therefore, required that a student major in one branch of science and minor in another.

Since it is found by careful investigation that mathematics appears more frequently than any other subject in the combinations of subjects taught by science teachers, students specializing in science should plan to include as many mathematics courses as possible in the undergraduate program.

SCIENCE MAJOR—BIOLOGICAL SCIENCE SPECIALIZATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
Math. 103 <i>Mathematical Analysis, I.</i>	3	Math. 104 <i>Mathematical Analysis, II</i>	3
BIOL. 101 <i>GENERAL BOTANY, I</i>	4	BIOL. 102 <i>GENERAL BOTANY, II</i>	4
<hr/>		<hr/>	
16½		15½	

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
BIOL. 201 <i>GENERAL ZOOLOGY, I</i>	4	BIOL. 202 <i>GENERAL ZOOLOGY, II</i>	4
CHEM. 101 <i>GENERAL COLLEGE CHEMISTRY, I</i>	4	CHEM. 102 <i>GENERAL COLLEGE CHEMISTRY, II</i>	4
<hr/>		<hr/>	
16½		16½	

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Mus. 100 <i>Music Appreciation</i>	2	Lang. 300 <i>Foundations of Language</i>	2
Electives	4	Electives	4
CHEM. 405 <i>ORGANIC CHEMISTRY, I.</i> ..	4	CHEM. 406 <i>ORGANIC CHEMISTRY, II</i> ..	3
PHYS. 101 <i>GENERAL COLLEGE PHYSICS, I</i>	4	(or 4)	
		PHYS. 102 <i>GENERAL COLLEGE PHYSICS, II</i>	4
<hr/>		<hr/>	
17		16	

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Eng. 100G <i>Western World Literature</i>	3	Ed. 4.... <i>Education Elective</i>	3
Elective	2	Elective—Humanities	2
SCI. 401 <i>TEACHING OF SCIENCE IN SECONDARY SCHOOL</i>	3	Elective	2
PHYS. 402 <i>MAGNETISM AND ELECTRICITY</i>	4	<hr/>	
<hr/>		15	

Total: 128 semester-hours

SCIENCE MAJOR—PHYSICAL SCIENCE SPECIALIZATION

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i> ...	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Ed. 100 <i>Mental Hygiene & Pers. Adj.</i> ..	2
Math. 103 <i>Mathematical Analysis, I.</i> ..	3	Math. 104 <i>Mathematical Analysis, II.</i> ..	3
CHEM. 101 <i>GENERAL COLLEGE CHEMISTRY, I</i>	4	CHEM. 102 <i>GENERAL COLLEGE CHEMISTRY, II</i>	4
<hr/>		<hr/>	
16½		15½	

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i> ...	3
H. Ed. 100 <i>Healthful Living</i>	2	Sci. 100C <i>The Earth Sciences</i>	2
PHYS. 101 GENERAL COLLEGE PHYSICS, I	4	PHYS. 102 GENERAL COLLEGE PHYSICS, II	4
BIOL. 101 GENERAL BOTANY, I	4	BIOL. 102 GENERAL BOTANY, II (or 4)	3
	16½		15½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Mus. 100 <i>Music Appreciation</i>	2
*Electives	4	Electives	4
CHEM. 405 ORGANIC CHEMISTRY, I....	4	CHEM. 406 ORGANIC CHEMISTRY, II	4
BIOL. 201 GENERAL ZOOLOGY, I	4	BIOL. 202 GENERAL ZOOLOGY, II (or 4)	3
	17		16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Eng. 100G <i>Western World Literature</i>	3	Ed. 4... <i>Education Elective</i>	3
Elective	2	Elective—Humanities	2
SCI. 401 TEACHING OF SCIENCE IN SECONDARY SCHOOL	3	Elective	2
*PHYS. 402 MAGNETISM AND ELECTRICITY	4		15
	15		

Total: 128 semester-hours

* Those specializing in physics should take Physics 402 in place of an elective in the fall semester of the junior year. This will then leave four semester-hours more for electives in the fall semester of the senior year.

In addition to the minimum program as outlined above the science majors have a regular program of visits to the high-school science courses in the College High School as follows:

<i>Freshman Year</i>	One visit each week during the school year in Junior-high-school science classes
<i>Sophomore Year</i>	One visit each week in the high-school biology course
<i>Junior Year</i>	One visit each week in either chemistry or physics classes
<i>Senior Year</i>	In the fall semester seniors pursue three high-school observations by special assignments in the six-year science program

Minors in Science

The following courses are required for a minor in biological science: BIOLOGY 101, 102, 201, 202, a two-point biology elective, and SCIENCE 401, making a total of 21 semester-hours.

The following courses are required for a minor in physical science: CHEMISTRY 101, 102, PHYSICS 101, 102, a two-point physical science elective, and SCIENCE 401, making a total of 21 semester-hours.

Students who major in another department and minor in a science field secure approval of the minor program by consultation with the Chairman of the Science Department.

THE FIRST YEAR

The first year is planned to give the student an insight into the role that science has played and is still playing in the drama of life. Specialization during this year begins with work in biology.

MATHEMATICS 103 AND 104. *Mathematics for Science Majors*

For a description of this course, see page 131.

Credit: 3 semester-hours each

SCIENCE 100C. *The Earth Sciences*

For a description of this course, see page 53.

Credit: 2 semester-hours

BIOLOGY 101 AND 102. *General Botany (Morphology and Physiology of Flowering and Non-Flowering Plants)*

This course acquaints the student with the methods and tools of science and develops an understanding of the importance of plants to mankind. Morphology and physiology of the cell and of the plant as a whole are considered first. A survey of the plant kingdom with emphasis on structural development and economic importance follows in the second semester.

Credit: 4 semester-hours each

Physical science majors are permitted to take the second semester of General Botany for three semester-hours of credit. Those students will enroll for BIOLOGY 102A. The laboratory work for BIOLOGY 102A involves two clock hours per week in lieu of the four clock hours required for those students enrolling in BIOLOGY 102.

BIOLOGY 102A. *General Botany (Morphology and Physiology of Flowering and Non-Flowering Plants)*

Please see description for BIOLOGY 102. BIOLOGY 102A involves a weekly laboratory of two clock hours.

Credit: 3 semester-hours

Science Course for Home Economics Majors

CHEMISTRY 103 AND 104. *Chemistry for Home Economics*

This course provides an opportunity for students of home economics to become acquainted with the major principles of chemistry and their application in the field of home economics. The work of the first semester deals with topics

selected from the field of inorganic chemistry. The work of the second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to home economics. The course consists of class discussions, reference work, laboratory and field trips which attempt to show the importance of the contributions of chemistry to the field of home economics.

Credit: 3 semester-hours each

Science Course for Physical Education Majors

CHEMISTRY 105 AND 106. *Chemistry for Physical Education*

This course provides an opportunity for students of physical education to become acquainted with the major principles of chemistry and their applications in the field of physical education. The work of the first semester deals with topics selected from the field of inorganic chemistry. The work of the second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to physical education. The course consists of class discussions, reference work, laboratory and field trips which attempt to show the importance of the contributions of chemistry to the field of physical education.

Credit: 3 semester-hours each

THE SECOND YEAR

The science work in this year is planned for both students majoring in the department and for those minoring in the department. Those minoring in the department are advised to take BIOLOGY 101 and 102, or CHEMISTRY 101 and 102, or PHYSICS 101 and 102.

BIOLOGY 201 AND 202. *General Zoology (Biology of Invertebrates and Vertebrates)*

The course in general zoology is designed to give students a broad understanding of the important facts regarding animal life that should be of interest to them and to those whom they are to instruct. Students are taught the peculiarities of structure and physiology of different animal types, and this knowledge is employed as a working basis for deductions made regarding the taxonomy, the economic importance, and the probable course of evolution of the many diverse forms. Particular emphasis is given to the problems connected with man's relations to his environment.

Credit: 4 semester-hours each

Physical science majors are permitted to take the second semester of General Zoology for three semester-hours of credit. Those students will enroll for BIOLOGY 202A. The laboratory work for BIOLOGY 202A involves two clock hours per week in lieu of the four clock hours required for those students enrolling in BIOLOGY 202.

BIOLOGY 202A. *General Zoology (Biology of Invertebrates and Vertebrates)*

Please see description for BIOLOGY 202. BIOLOGY 202A involves a weekly laboratory of two clock hours.

Credit: 3 semester-hours

CHEMISTRY 101 AND 102. *General College Chemistry*

The course provides opportunity for mastering the fundamentals of chemistry, for understanding the numerous and far-reaching effects of contributions of chemistry to modern living, for training in scientific method, for developing facility in taking and utilizing laboratory notes, and for learning to use standard reference books. The laboratory contains many experiments of value for demonstration in high-school chemistry. A major portion of the second semester's laboratory work is qualitative analysis. Accompanying such laboratory assignments are supplementary questions requiring reading of library reference books in chemistry.

Credit: 4 semester-hours each

Science Courses for Home Economics Majors**BIOLOGY 209. *Human Biology***

The course is designed for home economics majors. Bodily structure, functioning of parts, how that functioning affects human behavior are all considered. Primary emphasis is placed upon physiology rather than morphology and upon the maintenance of good health of the individual and of the community.

Credit: 3 semester-hours

BIOLOGY 210. *Elementary Bacteriology*

Since the course is designed for the home economics student, it is concerned primarily with these bacteria and fungi associated with food and nutrition, sanitation, hygiene, industry, and disease. Identification of the organisms, their economic importance, and their control are emphasized.

Credit: 4 semester-hours

Science Courses for Physical Education Majors**BIOLOGY 212. *Mammalian Anatomy for Physical Education***

This course covers a study of tissues, the skeleton, the articulations, the ligaments, and the musculature system of the human body. Correlated exercises on the anatomy of the cat are performed in the laboratory. This course meets for two lecture hours and two laboratory hours each week.

Credit: 3 semester-hours

BIOLOGY 214. *Physiology for Physical Education*

In this course a study is made of normal physiology based on previous study of mammalian anatomy. Special attention is given to problems encountered in the

teaching of physical education and hygiene. The major systems of the body are studied, reviewing the anatomical and histological basis for their function. Laboratory exercises enable the student to gain firsthand experience with many aspects of the lecture material

Prerequisite: BIOLOGY 212, *Mammalian Anatomy for Physical Education*

Credit: 3 semester-hours

THE THIRD YEAR

The work in the third year is planned for those who major or minor in science and for those who wish to choose electives in the field of science.

CHEMISTRY 405. *Organic Chemistry*

The course covers the chemistry of carbon compounds and gives increased facility and experience in manipulating complicated chemical apparatus. It treats of the role of chemistry in life processes, including the synthesis and adaptation of carbon compounds in industry, in medicine, and in daily living. The first semester's work covers the chemistry of simple chain compounds and includes fats and carbohydrates.

Credit: 4 semester-hours

CHEMISTRY 406. *Organic Chemistry*

The work of this semester covers the chemistry of multiple functional chain compounds, the ring compounds, proteins, vitamins, hormones, and the application of these compounds in industry, in foods, and in medicine.

Credit: 4 semester-hours

Biological science majors are permitted to take the second semester of Organic Chemistry for three semester-hours of credit. Those students will enroll for CHEMISTRY 406A. The laboratory work for CHEMISTRY 406A involves two clock hours per week in lieu of the four clock hours required for those students enrolling in CHEMISTRY 406.

CHEMISTRY 406A. *Organic Chemistry*

Please see description for CHEMISTRY 406. CHEMISTRY 406A involves a weekly laboratory of two clock hours.

Credit: 3 semester-hours

PHYSICS 101 AND 102. *General College Physics*

A study of mechanics of fluids and solids, properties of matter, and heat energy is followed in the second semester by a consideration of sound, theories of light, and electricity and magnetism. The course consists of demonstrations, lectures, discussions, problem-solving, and laboratory experiments.

Credit: 4 semester-hours each

Science Elective Course for Home Economics Majors**PHYSICS 306. *Household Physics***

This course covers the areas of mechanics, heat, electricity, and light. The emphasis throughout is on the applications to equipment used in the home. The course is closely correlated with the work in household equipment in the Home Economics Department. The course consists of demonstrations, lecture-discussions, and laboratory experiments. The laboratory work, wherever possible, is done with common household equipment. The work of the mechanics units develops the fundamentals of machines, and the ideas of work, power, and efficiency; in the heat unit, heating efficiency of stoves, home heating systems, and insulation are covered; in the electrical unit emphasis is on adequate wiring and understanding of the operation of electrical appliances, while the light unit is related to illumination in the home.

Credit: 3 semester-hours

THE FOURTH YEAR

All students majoring in the department are required to take SCIENCE 401, *The Teaching of Science in Secondary Schools*. This course, together with an increased amount of observation and participation in the College High School and with courses in the Education Department, serves as a means of coordinating the entire work of the department and of preparing the student for the work in supervised teaching he is to do in the succeeding semester. The staff members of the department cooperate with the Education Department in supervising this work.

SCIENCE 401. *The Teaching of Science in Secondary Schools*

The chief purposes of this course are: to review the educational objectives of science in public schools; to consider a program of instruction planned for all grades of the public-school system; to study the chief aids to instruction such as texts, manuals, workbooks, tests, and materials for the enrichment of teaching; to make a critical review of standards of classroom and laboratory instruction; to observe junior-high-school classes at work in science; and to participate in classroom activities in biology, chemistry, and physics prior to student-teaching. This course is required of all science majors. Observations are made in the eighth grade science class of the College High School.

Credit: 3 semester-hours

PHYSICS 402. *Magnetism and Electricity*

The most important aims and purposes of the course are as follows: (1) to provide a substantial background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

This course consists of lectures, demonstrations, reference readings, written and oral reports, laboratory experiments with modern electrical instruments, and

construction of simple electrical devices. Some of the topics studied are: modern concepts of the electronic structure of matter, electrical forces, magnetic fields, potential, resistance, impedance, capacitance, and characteristics of thermionic vacuum tubes.

Prerequisites: PHYSICS 101 and 102

Credit: 4 semester-hours

ELECTIVES

SCIENCE 401D. *The Teaching of Aviation in Secondary Schools*

This course covers the study of state aviation programs, texts, bulletins, free material for school use, demonstration equipment, tests, working models, visual aids, and references needed to teach aerodynamics, aircraft engines, meteorology, navigation, and aircraft communication in high schools. Field trips to airports and aviation industries are included.

Credit: 2 semester-hours

SCIENCE 404. *Problems in the Teaching of Science*

When a student has completed the assignment in student-teaching in a public high school in the State of New Jersey and has accumulated some experience with the problems of high-school science instruction, he returns to the college campus for an intensive study of a limited number of problems in a single field of science. The student concentrates his attention on general science, biology, chemistry, or physics for this period. This course is mainly a study of the published investigations dealing with curriculum construction, evaluation of current practices in junior and senior high-school courses, and the psychology of learning in science.

Credit: 2 semester-hours

SCIENCE 405. *Field and Laboratory Studies in Science*

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; e. g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned.

Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and illustrating them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course.

Prerequisite: Proficiency in biology and chemistry

Credit: 4 semester-hours

SCIENCE 409. *Senior High School Physical Science Demonstrations*

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations for the teacher.

Credit: 2 semester-hours

SCIENCE 410. *Junior-High-School Science Demonstrations*

This course covers the methods of experimental instruction in grades seven, eight, and nine. A detailed study is made of about three hundred demonstrations.

Credit: 4 semester-hours

SCIENCE 411. *Problems in Field Studies in Science*

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose.

Prerequisites: Field Studies in Science or its equivalent plus at least 12 points of biology

Credit: 2 semester-hours

SCIENCE 412. *Field Studies in Science: Biological*

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

Credit: 2 semester-hours

SCIENCE 413. *Field Studies in Science: Physical*

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

Credit: 2 semester-hours

SCIENCE 414. *Conservation of Plants and Animals*

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 415. *Conservation of Soil and Water*

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 418. *Three Centuries of Science Progress*

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries. Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role which the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Class demonstrations of historical experiments, readings in the original literature, and lectures and discussions are employed by the three or more science teachers of the course.

Credit: 2 semester-hours

SCIENCE 419. *Field Science and Conservation*

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

Credit: 2 semester-hours

SCIENCE 420. *Water Supply and Conservation Problems*

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, water shed management, stream pollution, and soil erosion gives students a background for understanding the problems involved in domestic and industrial use of water. State and

regional water conservation projects such as Incode, Passaic Valley Flood Control, and Stoney Brook Watershed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

Credit: 3 semester-hours

SCIENCE 421. *Water Analysis and Purification*

This course covers the phases of water inspection, analysis, and purification of value in safeguarding public and private water supplies, and in securing potable water from questionable sources. The work consists of class discussions, field trips, and laboratory experiences. Field trips are to water purification plants, sewage disposal plants, and board-of-health laboratories. The laboratory work is divided between the fields of chemical and bacteriological analysis of water. The necessary bacteriological background is developed in the course. Chemical analysis includes tests for harmful impurities and hardness.

Prerequisites: CHEMISTRY 101 and 102

Credit: 4 semester-hours

SCIENCE 422. *Consumer Science*

The purpose and organization of this course are to acquaint the consumer with the aspects of science in everyday life. Basic scientific principles are developed in the process of testing and evaluating consumer products. Field trips are taken to local industries and public utilities to evaluate processes as well as products. A laboratory testing program deals with such commercial products as household appliances to foodstuffs and fertilizers. A testing and instruction program is also developed with a local industry. This course is designed as a general education elective for non-science majors and minors.

Credit: 2 semester-hours

BIOLOGY 203. *Introduction to Field Biology*

In this course, the students live for ten days at the New Jersey State School of Conservation in the Stokes State Forest where they have the outdoors as their laboratory. Field trips are made to various types of habitats in order to acquire an understanding of the meaning and significance of a "balanced outdoor society." What occurs when this "balance" is disturbed is observed, and methods of and reasons for it are discussed. Taxonomy, ecology, and conservation are stressed during this concentrated period of outdoor living.

Credit: 2 semester-hours

BIOLOGY 402. *Mammalian Anatomy and Histology*

A study is made of the gross structure of a typical mammal and of the structural peculiarities of its various tissues. Both the anatomical studies and histological studies included in this course are pursued with functional significance strongly emphasized. This course prepares the student for the study of human physiology.

Prerequisite: Eight semester-hours of work in zoology

Credit: 4 semester-hours

BIOLOGY 407. *Comparative Embryology*

A study is made of the stages in development and factors influencing the development of different animal types, particularly the vertebrates. Students in this course follow carefully the development of the chick through the earlier stages. Serial sections of entire chick embryos in different stages of development are prepared by individual students and used as a basis for the study of the development of tissues and organs of the animal. Applications of these details of vertebrate development to the development of the mammal are based on observations made through the dissection of pig embryos.

Prerequisite: Eight semester-hours of work in zoology

Credit: 4 semester-hours

BIOLOGY 408. *Biological Technique*

This course is designed to furnish the prospective teacher of biology with the technical details necessary to enable him as a secondary-school teacher to handle successfully biological materials and experiments and demonstrations in which these materials are employed. Students are trained in methods of collecting and preserving plants and animals for use in the laboratory and classroom. Study is made of the proper methods of preparing illustrative materials with special emphasis laid upon the purpose of these materials.

Prerequisites: Eight semester-hours of work in zoology and four semester-hours of work in botany

Credit: 4 semester-hours

BIOLOGY 409. *Human Physiology*

A study is made of normal and abnormal physiology based on previous study of mammalian anatomy and histology. In addition to an analysis of the part played by organs and tissues in carrying out the essential functions of the body, special attention is given to problems of hygiene and sanitation. Applications of the above problems are made in reference to children of school age, and the physical condition of individual pupils is correlated with their behavior in the classroom.

Prerequisite: A course in vertebrate anatomy or BIOLOGY 402

Credit: 4 semester-hours

BIOLOGY 410. *Comparative Anatomy of the Vertebrata*

This course deals with representative members of the phylum chordata. The prochordata are considered briefly. Representative species of the cyclostomata, cartilagenous fish, bony fish, amphibia, reptiles, birds, and mammals are studied by means of dissections and demonstrations. Fundamental principles of the taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and should be of value for those interested in man and his place in the world.

Credit: 4 semester-hours

BIOLOGY 411. *Elementary Bacteriology*

This course covers the morphological and biochemical characteristics of bacteria, yeasts, fungi, and protozoa. The relationship of microorganisms to human welfare is stressed. Major topics include: history of microbiology, classification and naming, the physiology of microorganisms, microbiologic techniques and methods, useful activities of microorganisms, microbiology of sewage and water, microbiology of foods, infection and body defenses and infectious diseases. Laboratory sessions emphasize morphological characteristics and biochemical activities of microorganisms.

Prerequisites: BIOLOGY 101, 102, 201, and 202

Credit: 4 semester-hours

BIOLOGY 412. *Genetics*

This course considers the scientific basis of the gene concept and its support in experiments from Mendel's work to the present allegations of the Lysenko School. Documents of some of the milestones in the history of the science are studied, and the adherence to scientific method carefully noted. The wide uses of the science in plant and animal improvement and the discoveries related to man's heredity make an integral part of the study. The course helps the teacher of biology or social studies to discriminate between what is scientifically known and what is political philosophy in genetics. Laboratory exercises supplement lectures and discussion.

An elementary college course in biology is the only prerequisite, and this may be waived in approved cases.

Credit: 2 semester-hours

BIOLOGY 413. *Economic Botany*

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered as well as that of the seed plants.

Credit: 2 semester-hours

BIOLOGY 414. *Field Ornithology*

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats is visited so that one can become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and other problems are also considered.

Prerequisite: A year of biology or the equivalent

Credit: 2 semester-hours

BIOLOGY 415. *Entomology*

This course is designed to cover the fundamental aspects of entomology, organized so as to give students a general idea of the entire field. The major emphasis is on understanding basic principles which are of physiological and ecological significance. A survey is made of the common insect families together with experience in identifying major orders and families. Attention is given to insects as economic pests and as vectors of disease. Laboratory work includes a study of gross and microscopic morphology and identification of major groups of insects by the manipulation of keys.

Prerequisites: BIOLOGY 201 and 202

Credit: 4 semester-hours

CHEMISTRY 201. *Analytical Chemistry: Qualitative Analysis*

The aims of this course are: a knowledge of the preparation of solutions; the separation and identification of the metallic and non-metallic ions; training in the techniques of careful note taking and interpretation of laboratory manipulation to secure information. The class work covers a systematic study of chemical equilibrium and its use in qualitative analysis. The laboratory work continues the work started in general chemistry and involves the complete analysis of several general unknowns.

Prerequisites: CHEMISTRY 101,102

Credit: 4 semester-hours

CHEMISTRY 202. *Analytical Chemistry: Quantitative Analysis*

The purposes of the course are: to develop and apply the fundamental principles of solutions; to perfect the techniques of chemistry; to analyze quantitatively substances; to use the chemical balance. The class work covers that chemistry which is needed for gravimetric and volumetric analysis. The laboratory work involves gravimetric analysis, acidimetry and oxidation-reduction reactions.

Prerequisites: CHEMISTRY 101, 102

Credit: 4 semester-hours

CHEMISTRY 203. *Analytical Chemistry: Applied Quantitative Analysis*

The purposes of this course are: to develop techniques needed to use routine methods of analysis of common substances; to give experience in the application of chemistry to soil analysis, blood analysis, food analysis, and household preparations. The class work covers the electrochemical theory of oxidation-reduction, the modern atomic theory and its applications to understanding analytical procedure, theory of colorimetry, and the measuring of hydrogen ions.

Prerequisites: CHEMISTRY 101, 102

Credit: 4 semester-hours

CHEMISTRY 407. *Advanced Quantitative Analysis*

This course is adapted to the needs and preparation of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colorimetric methods; use of organic reagents in analyses; electrometric titrations, conductimetric titrations; spectrographic methods of analysis; electro-deposition of metals; and special methods of analysis.

Prerequisites: General college physics and one semester of quantitative analysis, or special permission of the instructor

Credit: 4 semester-hours

CHEMISTRY 408A. *Industrial Chemistry, Part I*

The purpose of this course is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries in the state. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 408B. *Industrial Chemistry, Part II*

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in CHEMISTRY 408A. Also, a study is made of the economics of chemical industry, chemistry and industry in general, and the effects of chemical discoveries upon living conditions.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 411. *Physical Chemistry, Part I*

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and heterogeneous equilibria.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 412. *Physical Chemistry, Part II*

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radioactivity.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 413. *Atomic Structure and Atomic Energy*

This is a lecture course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics studied include the following: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; chemical versus atomic explosions; the chain-reacting pile; production of plutonium; detection and measurement of nuclear radiation and incendiary effects of atomic explosions; atomic energy for peace-time uses; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials for atomic energy.

Prerequisites: General college chemistry and general college physics, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 415 AND 416. *Modern Chemistry*

This course offers a survey of the fundamental principles of chemistry and a study of recent developments. It emphasizes structures of chemical species, particularly the relationships of these structures to the chemical and physical properties of substances.

It is a two-semester course with one weekly class meeting lasting two hours. The course is held in conjunction with the Continental Classroom telecast of eighty lecture-demonstrations per semester. Class meetings involve discussion, lectures, demonstrations, evaluations, or experiments to supplement the television presentation.

Credit: 3 semester-hours each

PHYSICS 304. *Introduction to Photography*

This is a beginning course in photography consisting of laboratory work and field work supplemented by lectures and demonstrations. Some of the topics covered are: the construction and operation of cameras, common films and papers, fundamental chemistry of photography, development and printing. A student needs at least one camera.

Credit: 4 semester-hours

PHYSICS 305. *Acoustics*

This course offers both science and non-science majors a practical approach to the study of sound. It provides the student with a knowledge of the means and processes by which sound is produced, controlled, transmitted, and recorded. The student explores such topics as the nature and transmission of sound, harmonic motion, hearing, speech, musical instruments, and architectural acoustics. The

course consists of lectures, demonstrations, class discussions, laboratory, field trips, and films to show the application of acoustics to everyday living.

Credit: 2 semester-hours

PHYSICS 307. *Aviation*

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, motions of an airplane, stability, piloting, motorless flight, and aircraft engines. Flight experience is made available as a part of this course.

Credit: 2 semester-hours

PHYSICS 308. *Elementary Astronomy*

This course in descriptive astronomy is designed for the general student. Today lay people, and especially college students, are developing an avid interest in our environment beyond the surface of the planet on which we live—we are looking to our neighbor planets in new perspective. Acquisition of a working knowledge and appreciation of the tools of the astronomer; the nature of the solar system; location of points on the celestial sphere; motions and laws relative to systems; the nature, classification, and magnitudes of stars; and cosmogony are course objectives.

Credit: 2 semester-hours

PHYSICS 405. *Light and Optical Instruments*

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light.

Prerequisites: General college physics and a course in electrical measurements

Credit: 4 semester-hours

PHYSICS 406. *Astronomy*

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, the cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system.

This study is aided by the use of selected films and slides, actual sky study and field trips, the use of the sextant, octant, transit, spectroscope, sky maps, planetaria, and telescopic observations.

Prerequisites: General college physics and chemistry

Credit: 4 semester-hours

PHYSICS 407. *Aviation*

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, lift, drag, stability, motions of an airplane, piloting, motorless flight, aircraft engines, power performance, types of propellers, engine instruments, and flight instruments.

Field trips to airports and aviation industries are included. Flight experience is made available as a part of this course. Students who have taken PHYSICS 307 are not eligible to take this course.

Credit: 4 semester-hours

PHYSICS 408. *Advanced Aviation*

This course deals with the study of navigation; meteorology as applied to flight operations; radio communications; flight and navigational radio aids; instrument flight; air traffic control; jet, turbojet, and rocket flight; and recent advancements in aviation.

Prerequisites: PHYSICS 307 or PHYSICS 407

Credit: 2 semester-hours

PHYSICS 409. *Basic Electronics*

This is an introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube characteristics, vacuum tubes as circuit elements, and gaseous discharge. The use of transistors is also considered. Applications of electronics to instrumentation, radio, and television are introduced.

Prerequisites: General College Physics and Magnetism and Electricity

Credit: 4 semester-hours

PHYSICS 410. *Meteorology*

This course is designed to develop a fuller appreciation of our atmosphere with emphasis on the meteorological applications of physical principles. Consideration is given to weather elements; the temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment.

Credit: 2 semester-hours

PHYSICS 411. *Photography*

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers, tanks, and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction.

Prerequisites: General physics and general chemistry or permission of the instructor

Credit: 4 semester-hours

PHYSICS 415. *Introduction to Modern Physics*

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radioactivity, cosmic rays, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required.

Prerequisites: General College Physics, General College Chemistry, and a course in electrical measurements

Credit: 4 semester-hours

PHYSICS 416. *Introduction to Analytic Mechanics*

This course is a background course for science teachers. It includes some detailed treatment of the physics of classical mechanics, of the kinematics and dynamics of particles, and the dynamics of rigid bodies. The necessary mathematical methods of handling the data and theory are introduced and developed along with the course material. The course consists of lectures, discussions, demonstrations of practical application, and problem solving. There are two hours of lecture-recitation and four hours of laboratory work per week.

Prerequisite: General College Physics

Credit: 4 semester-hours

THE DEPARTMENT OF THE SOCIAL STUDIES

The social studies teacher requires a very broad knowledge of the facts of social life, both past and present. He needs not only to know the facts, but to be able to think about them. Even more important, he must know how to impart his knowledge to younger people and to stimulate their thinking and civic interest. The secondary schools of today are rightfully expected to train for a citizenship which is alert, informed, and socially sensitive. The social studies teacher must bear a large responsibility for the accomplishment of this result.

The Social Studies Department offers a wide range of courses in the subject-matter fields aimed to provide the necessary range of knowledge. This department offers for all students, whether social studies majors or not, a course in The Development of World Civilization which presents a rapid survey of the civilizations of the past. For all students there are, likewise, courses in Contemporary American Life.

Social studies majors are required to take courses which are at once broad and thorough in those fields which the secondary-school teacher chiefly needs. Such are the courses in European history, American history, and those courses in eco-

nomics, politics, and sociology which contribute so largely to an understanding of present-day problems, both American and international.

The aim is that in each of these fields, as the subject matter is studied, there shall also be considered the problems of teaching in that particular field. But in addition to this professionalization of subject-matter, every social studies major is required to take in the senior year a specialized course in the methods of teaching the social studies.

Social Studies Major

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Mus. 100 <i>Music Appreciation</i>	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Sci. 100A <i>Physical Science or Sci. 100B Biological Science</i>	4	Sci. 100C <i>The Earth Sciences</i>	2
SOC. ST. 101 <i>DEV. OF MODERN EUROPE, I</i>	4	Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2
		SOC. ST. 102 <i>DEV. OF MODERN EUROPE, II</i>	3
	16½		16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Eng. 100G <i>Western World Literature</i>	3	H.Ed. 100 <i>Healthful Living</i>	2
Electives	4	Electives	4
SOC. ST. 201 <i>DEV. OF THE UNITED STATES, I</i>	3	SOC. ST. 202 <i>DEV. OF THE UNITED STATES, II</i>	3
	16½		15½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Lang. 300 <i>Foundations of Language</i>	2
Soc. St. 301 <i>ECONOMICS or Soc. St. 302 FIELD STUDIES IN URBAN LIFE</i>	3	Electives	3
Soc. St. 304A <i>AMERICAN GOVERNMENT, I</i>	3	SOC. ST. 302 <i>FIELD STUDIES IN URBAN LIFE or Soc. St. 301 ECONOMICS</i>	3
	16	SOC. ST. 304B <i>AMERICAN GOVERNMENT, II</i>	3
			16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Humanities</i>	2	Ed. 4— <i>Education Elective</i>	3
Electives	5	Elective — <i>Mathematics or Science</i>	2
SOC. ST. 401 <i>TEACHING OF SOCIAL STUDIES IN SECONDARY SCHOOL</i>	3	SOC. ST. 403 <i>SEMINAR IN SOCIAL STUDIES</i>	2
SOC. ST. <i>AREA STUDY</i>	3		
	16		15

Total: 128 semester-hours

NOTE: 9 semester-hours of electives must be selected in a secondary teaching field other than the major.

Social studies majors are required to make at least sixty observations in the College High School, for the most part in the junior and senior years. In so far as it is possible, these observations should cover the range of high-school classes from the seventh to twelfth grades and should be so organized as to follow the development of entire teaching units.

Minors in the Field of the Social Studies

There are two minors in the field of the social studies; one in history, the other in political science and economics.

The courses in The Development of World Civilization (SOCIAL STUDIES 100A and 100B) may be counted for six credits toward the twenty-one necessary to complete the minor in history. SOCIAL STUDIES 201 and 202 and SOCIAL STUDIES 101 and 102 and SOCIAL STUDIES 401 must be used to complete the minor.

The courses in Contemporary American Life (SOCIAL STUDIES 200A and 200B) may be used for six of the twenty-one credits necessary for the minor in political science and economics. The remaining twelve credits should consist of SOCIAL STUDIES 301, 303, 304A, 304B, and 401. When it becomes possible to offer more elective courses, it is probable that other courses in the field of political science and economics will be available to those seeking a minor in that field.

THE FIRST YEAR

During the first year the social studies major, like all other students, takes a course in The Development of World Civilization to orient him in the field of social studies and to provide him with a background of understanding for all the social studies work of the future.

In addition, he begins his work as a social studies major by an intensive survey of European history.

SOCIAL STUDIES 100A AND 100B. *The Development of World Civilization*

For a description of these courses, see page 51.

Credit: 3 semester-hours each

SOCIAL STUDIES 101. *The Development of Modern Europe, Part I*

The course deals with the differentiation in pattern of the rising national states of England and France, politically, economically, culturally, and the contraction of the Holy Roman Empire; the period of the Reformation not only in its religious aspect but in the political, economic, intellectual, and national; the development of parliament under the Tudors and Stuarts; the rise of both Russia and Prussia as states; the French Revolution and the period of Napoleon.

Credit: 4 semester-hours

SOCIAL STUDIES 102. *The Development of Modern Europe, Part II*

This course includes a study of the main political, economic, social, intellectual, and cultural developments in Europe since the Congress of Vienna; the In-

dustrial Revolution, the rise of liberalism, nationalism, imperialism, and democracy; the unifications of Italy and Germany. The growing factors responsible for World Wars, I and II, are discussed. The main purpose of this study is to establish an understanding of the importance of the period in relation to the modern world.

Credit: 3 semester-hours

THE SECOND YEAR

All students of the second year, social studies majors included, make a broad survey of current social, economic, and political problems. These courses carry to completion the work of the first year in *The Development of World Civilization*. Social studies majors continue their sectionalized preparedness with courses in American history.

SOCIAL STUDIES 200A AND 200B. *Contemporary American Life*

For a description of these courses, see page 51.

Credit: 3 semester-hours each

SOCIAL STUDIES 201 AND 202. *The Development of the United States*

This course constitutes a general survey of the development of the American nation from the period of discovery and exploration to the present. Opportunity is given to examine, analyze, and interpret the development of the main streams of American thought and action. Due consideration is given to political trends, but the year's work also treats of the economic, cultural, and social foundations of American institutions.

Credit: 3 semester-hours each

THE THIRD YEAR

In this year the student comes into his electives, both in his own field of the social studies and in the fields of his chosen minors. Courses are offered in sociology, political science, economics, history, and field studies. All of these courses are rich with materials for his teaching in the contemporary fields of history, and especially in the field of twelfth-grade American history. The courses for students majoring in the social studies are 301, 302, 304A, and 304B.

SOCIAL STUDIES 301. *Economics*

This course aims to provide the student with a detailed knowledge of the development and function of American economic institutions, the maladjustments that are apparent, and the changes that are in progress. The topics considered are: the corporation, banks, capital, industrial and agricultural production, problems of consumption, monopoly, foreign exchange, market price, and the distribution of wealth.

Credit: 3 semester-hours

SOCIAL STUDIES 302. *Field Studies in Urban Life*

This is a field-studies course in which the New York Metropolitan Area is used as the laboratory, and the social, economic, and political activities of the people of the area constitute the subject-matter. The course is designed to furnish firsthand experiences complementary to all other social studies courses, to reveal new horizons, and to train the student in field-work techniques. Studies are made of levels of living, minority groups, governmental services, economic institutions, and of the historical and geographic background of the region. There are eight field trips. To supplement the trips classroom discussions, lectures, moving pictures, and other multi-sensory aids are used.

Credit: 3 semester-hours

SOCIAL STUDIES 304A AND 304B. *American Government: Local, State, and National*

This course is designed to present a picture of American government as a whole, rather than as separate compartments labeled "local," "state," and "federal." Legislation, administration, and adjudication are treated as processes which occur at all levels of government. Contrasts are drawn, however, when differences exist among local, state, and federal organization and function. Throughout the course, examples are taken from the municipal, county, and state governments of New Jersey in an effort to acquaint the student with his immediate governmental environment. This effort also tends to correct the undue emphasis ordinarily placed upon the federal government.

Credit: 3 semester-hours each

ELECTIVE**SOCIAL STUDIES 303. *The Origins and Development of the American Economy***

The general purpose of this course is to trace the history and theory of our present economic system through an examination of the original ideas, forces, institutions, and processes which have shaped its progress.

Specifically, this study describes how technology, transportation, modern credit and banking, business methods, trade unions, and monetary policies have been progressively fashioned and developed; it explains how public policy toward agriculture, commerce, industry, investment, labor, and foreign trade has been formulated by a process of social experimentation; and, finally, it indicates the areas in which new ideas, public policy, and institutional arrangements contribute to the further progress of the American economy so that it can become a more efficient mechanism for augmenting national and international well-being.

Credit: 3 semester-hours

THE FOURTH YEAR

The work of the fourth year serves to bring to a focus the work of the preceding years, as regards both subject-matter and the teaching of it. Social studies majors during the first semester are given a systematic course in the Methods of

Teaching Social Studies. They also take a course in a specific area of social studies specialization.

This preparation leads directly to actual teaching experience when, in the second semester, each major spends ten weeks in a secondary school teaching the social studies under the careful supervision of a teacher in that school and of members of the College staff.

In addition to the above mentioned required courses each senior is required to take the seminar in social studies upon return from student teaching.

SOCIAL STUDIES 401. *The Teaching of the Social Studies in Secondary Schools*

The course aims to present recent tendencies in educational method in teaching the social studies. A program is presented containing the correlation of subject-matter organization in socialized recitation, the teaching of current events, projects in citizenship, and the use of the project-problem as a method of teaching history and civics. A laboratory containing texts and workbooks in the social studies field is available to the students of this course.

Credit: 3 semester-hours

SOCIAL STUDIES 403. *Seminar in Social Studies: Basic Issues in The Social Studies*

This offering is designed for social studies majors when they return from student teaching. As its title suggests, the course is built around issues which have long been considered fundamental to an understanding of American democracy.

Credit: 2 semester-hours

ELECTIVES

The following are intended as elective courses for juniors and seniors; some of them may, under certain circumstances, be taken by sophomores with the consent of the Chairman of the Department.

Ancient and Medieval History

SOCIAL STUDIES 423. *Roman Civilization*

This course traces the social changes in Rome from the earliest times to the end of the Western Roman Empire. Attention is directed to the earliest features of Roman civilization and to the changes—political, social, and economic—resulting from Etruscan, Carthaginian, and Greek influences. The rise and fall of the empire are discussed with relation to their importance in medieval civilization.

Credit: 2 semester-hours

SOCIAL STUDIES 425. *Medieval Civilization*

This course covers the period from the decline of Rome to about 1500. It first emphasizes the blending of barbarian cultures with that of the Roman resulting in feudalism as a way of life. After that a study is made of the gradual evolution

of towns, a trade and industrial economy on a broadening scale, the emergence of monarchical states, an intellectual awakening with the founding of universities, all of which leads finally to our modern system of national states.

Credit: 3 semester-hours

SOCIAL STUDIES 426. *Medieval History to 1498*

In the first part a study is made of the factors contributing to the political breakdown of the imperial principle, such as the growth of Christianity, barbarization of the West, and the expansion of Islam. Increasing centralization in France under the Capetians is contrasted with the rapid decentralization of the Holy Roman Empire. The growth of Feudalism and the Crusades is emphasized. The second part is devoted to the developments in Western Europe after 1200, stressing political movements, medieval commerce, guilds, growth of towns, and cultural changes.

Credit: 4 semester-hours

SOCIAL STUDIES 427. *Ancient History to 378 A.D.*

The first part of this course covers the Oriental period and the Greek through the Periclean Age. Detailed study is given the Egyptian, Babylonian, and Hittite cultures, and Athenian democracy and imperialism. The second part covers the Hellenistic period from the rise of Philip of Macedon, stressing attempts at federalism. It also covers all periods of Roman history, placing special emphasis on republican forms and imperial experiments in governmental organization and control.

Credit: 4 semester-hours

SOCIAL STUDIES 473. *The Arts in Western Civilization*

This course is designed to show how the social, economic, political, and religious movements in Western Civilization influenced the aesthetic expression of Europe from the Golden Age of Greece to the Rise of the Industrial Revolution. Greek, Roman, Byzantine, Gothic, Baroque, and Rococo art, architecture, and music are discussed and illustrated.

Credit: 2 semester-hours

Modern European History

SOCIAL STUDIES 414. *Modern England*

This course deals both with the historical periods as such and with the influences of the political, economic, and social forces in the English literature of the century. The Napoleonic era, political reform, factory reform, the humanitarian movement, the Irish question, the ministries of Gladstone and Disraeli, and the interpretation of politics and literature are considered.

Credit: 2 semester-hours

SOCIAL STUDIES 441. *Economic History of Europe*

The study of Europe from an economic point of view is particularly important in the light of present European problems and their relation to world-wide conditions. This course is a survey of the economic life and development of Europe from the emergence of the ancient civilizations to the beginning of the modern economic world. It gives special attention to economic causes that underlie the dislocation and perplexities of the last century.

Credit: 2 semester-hours

SOCIAL STUDIES 448. *The British Dominions*

This course deals with the role Canada, Australia, New Zealand, and South Africa are playing in present world affairs. Special emphasis is given to Canada and its dual position as an American state and a part of the British Empire.

Credit: 2 semester-hours

SOCIAL STUDIES 457. *Development of Russia*

Factors which have shaped the evolution of the Russian people, such as Byzantinism and the Greek Orthodox faith, the Synod, tartar state organization, the Mir, Westernization from Peter to Lenin, Slavophilism and dialectic materialism, are emphasized. An account is presented of Soviet internal organization, Sovkhoz, Kolkhoz, and the Five-Year plans. In addition to the historical background, Russia's great writers are discussed in the light of social and political developments.

Credit: 2 semester-hours

SOCIAL STUDIES 458. *Russia as a World Power*

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, and Stalin, is described. The changing views of the Second and Third Internationals, and the organization and methods of the Comintern are discussed. A chronological account of Soviet diplomacy, since Chicherin, is offered.

Credit: 2 semester-hours

SOCIAL STUDIES 493. *Western Europe Since World War I*

This course presents an outline of the rise of communism and facism and the reaction of western democracies to these movements. The Civil War in Spain, the Munich Pact, the failure of the League of Nations, diplomatic events of the World War II era, United Nations problems, the North Atlantic Pact, and special problems of western defense are emphasized. An evaluation of western Europe's significance for the United States is attempted.

Credit: 4 semester-hours

United States History**SOCIAL STUDIES 408. *A History of New Jersey***

This course is designed to assist teachers in acquiring a better knowledge of their state. A study is made of the history of New Jersey from the point of view of the social, political, economic, and cultural development of the people from the beginning of the settlement to the present. Special attention is given to the geographical and industrial aspects of the state, and the place of New Jersey in the national setting.

Credit: 2 semester-hours

SOCIAL STUDIES 413. *Economic History of the United States*

The great trends and movements in agriculture, finance, commerce, manufacturing, transportation, and industrial relations are traced from their beginnings in the colonial period to their contemporary expressions in the present crisis. This course supplements, but it does not duplicate, courses in the political history of the United States or courses in economic principles and problems.

Credit: 2 semester-hours

SOCIAL STUDIES 419. *American Political Biography*

This is the study of the life and influence of the leading figures in American political and social history. It is the aim here to show the relation of each of these characters to the times in which he lived and to point out how he influenced the trend of American life. The study includes such leaders as Washington, Jefferson, Hamilton, Webster, Lincoln, Cleveland, T. Roosevelt, and Wilson.

Credit: 2 semester-hours

SOCIAL STUDIES 438. *The Literature of American History*

A brief description of the material available for the study of American history is followed by class practice in finding and using the primary sources of some of the facts commonly taught in schools. Representative American historians, their training for historical study, the sources they used, the degree of accuracy with which they used their sources, their point of view, their plan of organization, and their present importance are discussed.

Credit: 2 semester-hours

SOCIAL STUDIES 447. *Diplomatic History of the United States*

The purpose of this course is to show how we have become gradually conscious of our world interests and responsibilities, and the important role we have come to play in international politics. The growing concept of world democracy as opposed to commercial and military imperialism, is stressed.

Credit: 2 semester-hours

SOCIAL STUDIES 471. *The United States Since World War I*

This course surveys the major problems, economic, social, political, and international, which have marked our national development since the end of the first World War. It is intended especially for social studies seniors as a preparation for the second year of secondary-school American history as provided for in the recently adopted state requirements.

Credit: 2 semester-hours

SOCIAL STUDIES 474. *America in Transition*

This course surveys rapidly the results of the Civil War and then emphasizes the major trends, economic and social, which have made modern America. It is intended as a more advanced study than that which is made in the undergraduate course. The period covered is from 1867 to around 1914.

Credit: 2 semester-hours

SOCIAL STUDIES 475. *The History of American Thought*

This course considers the influential thinking in America from the Mayflower Compact to the Marshall Plan to see how certain ideas or trends of thought have grown out of situations and have in turn helped to mould the course of our history. The student should gain an appreciation for the American contribution to world culture, and an examination is made of outworn stereotypes which exist today. The writings and discourses of important American thinkers are considered including Mather, Paine, Jefferson, Emerson, Thoreau, and Veblen.

Credit: 2 semester-hours

SOCIAL STUDIES 480. *Social History of the United States*

This course presents a study of the social and cultural aspects of American history. As such, it supplements but does not take the place of economic and political history. The course considers population movements and growth, rural and urban social problems, status of women, family life, utopian ventures, mass media of communication, amusements and recreation, and human rights.

Credit: 2 semester-hours

The Americas**SOCIAL STUDIES 415. *Latin-American Relations of the United States***

This course aims to provide the information necessary to clear understanding and accurate appreciation of the political, economic, and social relations that have developed between us and our Latin-American neighbors. To achieve this end, it considers the geographical conditions, the historical events, and the civic circumstances that have motivated and directed the growth of these relations and that will determine our Latin-American policy in the future.

Credit: 3 semester-hours

SOCIAL STUDIES 435A. *The Americas: A Contemporary Political, Economic, and Cultural Survey, Part I*

This course deals specifically with the relations of the United States and the Caribbean countries. Attention is given to the dependencies of the United States in this region as well as to the independent republics. Twentieth Century political, economic, and cultural developments of this region are stressed in light of the inter-American system.

Credit: 2 semester-hours

SOCIAL STUDIES 435B. *The Americas: A Contemporary Political, Economic, and Cultural Survey, Part II*

This course deals specifically with the Twentieth Century political, economic, and cultural life of the South American nations. The role which the South American states play in world affairs is stressed. Attention is given to post-World War II developments and adjustments in South America.

Credit: 2 semester-hours

SOCIAL STUDIES 440A AND 440B. *The Development of Central and South America: as Colonies and Nations*

The first part of this course surveys the period of exploration and settlement in the colonies of South and Central America. It traces the revolutionary movements that led to their independence and national development as Latin American countries. The second part studies the experiences of the various Latin American nations under different forms of government, ranging from absolute dictatorships to "popular front" administrations. It explains the economic and social standards of living accepted by the South and Central American people, and recognizes the contributions they have made to the growth of Pan-Americanism during the last century.

Credit: 2 semester-hours each

SOCIAL STUDIES 453B. *The Development of Canada*

This course is devoted to the study of the historical background, geographical environment, governmental organization, economic behavior, and social conditions of the northern neighbor of the United States. Its professional objective is to provide the understanding and appreciation necessary to the student and teacher who may follow and interpret the growth, internal and external, of the Dominion of Canada and of its relation to the United States as well as to the British Commonwealth of Nations.

Credit: 2 semester-hours

Anthropology

SOCIAL STUDIES 445. *Social Anthropology*

This course provides an introduction and study of human origins, early man, race, language, and physical anthropology. It surveys the development of cul-

tures and considers inventions and adaptation and other processes of cultural growth and change. It focuses attention upon the origins and growth of human civilization and the place of the individual in the framework of society.

This is a course in the basics of anthropology including its related elements in biology and physical science. There is emphasis on the social, institutional, and cultural outcomes of such study with a view to its applicability to the several social studies as a means of enriching these several social studies and aiding in their more thorough understanding.

Credit: 2 semester-hours

International Affairs

SOCIAL STUDIES 412. *International Government*

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international legislative, executive, administrative, and judicial problems are studied. Specifically, among the topics discussed are: the national State system, sovereignty, equality, intervention, international law, diplomatic services and procedures, international conferences and unions, sanctions, treaties, arbitration, international courts of justice, armaments and war, League of Nations, International Labor Organization, regional agreements, the United Nations.

Credit: 3 semester-hours

SOCIAL STUDIES 434. *Contemporary World Affairs*

This course is devoted to a survey of the leading diplomatic, economic, political, and military issues before the world today. The backgrounds from which these international affairs have evolved are reviewed. A study is made of the significance of these issues in the development of a program for international cooperation and peaceful living among the peoples of the world.

Credit: 2 semester-hours

SOCIAL STUDIES 442. *The Far East*

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the historical background of China and Japan, and on our relations with the Philippines. Oriental folkways, religion, education, population shifts, and strategic questions are discussed. This course provides an approach to the problems the United States must face in the Far East.

Credit: 3 semester-hours

SOCIAL STUDIES 451. *The Middle East*

This course is a survey of Indian and Moslem civilization. It shows that economic and political changes alone do not suffice to adjust the peoples of the Middle East to Twentieth-Century civilization, and that many cultural traditions must vanish while some forgotten features of the past are to be revived. Post-

war planning for the region from the Near East through Persia, India, Burma, Thailand, and Malaya to the Netherland East Indies is discussed.

Credit: 3 semester-hours

Economics

SOCIAL STUDIES 446. *Current Problems in Economics and Government*

This course is designed to analyze the relationship of economics to government. The causes and results of governmental activity are discussed in the light of their economic significance and their bearing on public welfare.

Credit: 2 semester-hours

SOCIAL STUDIES 450A AND 450B. *Modern Economic Problems and Policies*

The purpose of this course is to contribute to the general need for increased knowledge in the area of economic relationship, using the problem-approach method of analysis. 450A begins with a brief recapitulation of the overall functioning of the economic system, after which the class proceeds to a detailed study of our broader economic problems and the public policies relating to them. Specifically, the problems are those relating to population and natural resources, the economic functions of government, the measurement of economic activity, monetary stability, basic banking problems, business cycles, marketing trends, economic inequality, and social security. 450B considers those problems associated with the world economy, international trade and exchange, monopoly and its regulations, the problems concerned with the control of public utilities, emergency price regulation and economic stabilization, labor problems, the problems of public finance, the public debt and fiscal policy, and finally, the nature of comparative economic systems and their relations with each other.

Credit: 4 semester-hours

SOCIAL STUDIES 456. *International Economic Relations*

The purpose of this course is to study the significance of international trade and exchange to the economic life of our nation and the world economy. An analysis of the contrasting economic philosophies relating to international economic organization is made. Special emphasis is given to those policies which tend to promote freer trade, including the classical doctrine of comparative costs, the Reciprocal Trade Agreements Act, and the International Bank and Currency Stabilization Fund.

Credit: 2 semester-hours

SOCIAL STUDIES 482. *Conservation and Rural Economic Life*

This course provides for a study of one of the basic economic problems in America today. Land use, farm loans, price support of farm products, increased acreage production, conservation practices, are among the topics studied to give

the student a better understanding of the relationship between rural and urban living. Trips are arranged to nearby farms, dairy cooperatives, farm bureaus, banks, and town meetings.

Credit: 2 semester-hours

Sociology

SOCIAL STUDIES 429. *Present-Day Social Problems*

Beginning with a survey of levels of living in the United States and their relation to the distribution of wealth and income, this course proceeds with a study of poverty and crime, their sources, treatment, and prevention. Among the topics discussed are: housing, wages, unemployment, physical illness, accidents, old age, physical and mental defectiveness, the nature and extent of crime, police and prison systems, the criminal courts, and methods of punishment and reformation.

Credit: 2 semester-hours

SOCIAL STUDIES 439. *The Family and Its Problems*

This course gives a history of the family, our American family patterns, the effects of social change, marital patterns of interaction, social roles, sources of conflicts and frustrations, divorce and desertion, special problems in family life, economics of children and the home, social legislation pertaining to family problems, marital adjustments, personality change after marriage, parent-child relationships, and personality reorientation.

Credit: 2 semester-hours

SOCIAL STUDIES 443. *Youth and the Community*

This course is a sociological study of youth in its many relations to the community. Special attention is given to problems which arise in the relationship of youth and the community; e.g., juvenile delinquency, conditions contributing to maladjustment, poorly adjusted children, and educational and social agencies active in solving youth behavior. Through the study of concrete cases, social treatment and community research are demonstrated.

Credit: 2 semester-hours

SOCIAL STUDIES 444. *The Social Bases of Human Relations*

This course emphasizes the social bases of human nature and personality. Primary and secondary groups, folkways, mores and institutions are considered. Special consideration is given to ecological and community differentials in reference to poverty, unemployment, criminality, incidence of disease, and mental derangement. Personal disorganization is studied as a process, and social forces leading to community maladjustment and social breakdown are reviewed.

Credit: 2 semester-hours

SOCIAL STUDIES 476. *Personality Development and Group Relations*

A study is made of personality growth through social contacts, the environmental factors found in the home and family, neighborhood, play, and school groups. Methods of measuring the place of the individual in the group, analysis of the group process, ways of bringing about better life adjustment, and integrating experiences are the subject matter of the course. Concrete cases of maladjustment to society and disintegrated personality are studied. Agencies in the community which serve youth are visited, and leadership in community group activities is recognized as part of the course requirements.

Credit: 2 semester-hours

SOCIAL STUDIES 477. *Rural Sociology*

During this course the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

Credit: 2 semester-hours

SOCIAL STUDIES 483. *Modern Approaches to Social Problems*

This course is designed to acquaint students with techniques and practices developed in recent years for a scientific approach to problems of human relationship. Techniques to be studied include: sampling techniques for testing large groups, questionnaires, interviewing techniques, objective observation of culture patterns, objective observation in controlled laboratory situations, sociometrics, role-playing techniques, attitude testing, and use of semantic analysis in test construction. Students become acquainted with these techniques through the study of a variety of recent reports. The selection of items to be studied depends on the needs and interests of class members. This course is designed to aid in the development of attitudes and practices which make possible the use of a modern, scientific approach to social problems.

Prerequisite: An introductory course in sociology or special permission of the instructor

Credit: 2 semester-hours

SOCIAL STUDIES 494. *Social Studies and Conservation*

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the non-renewable resources, minerals, oil, and coal. Economic, social, community, national, and individual problems are approached by giving the student firsthand experiences gained through extensive field trips in northern New Jersey. This course is of particular interest to social studies and elementary school teachers but also

forms an excellent experience background for all educational fields. Methods of teaching, courses of study, and teaching units are developed.

Credit: 2 semester-hours

Political Science

SOCIAL STUDIES 430. *The Citizen and the State*

This course is designed to help any citizen become better acquainted with the many organizations by and through which our complex society manages itself. The emphasis is placed on government and political organizations, but the course also includes a study of the many other organizations of the community, the county, and the state that have to do with directing policy and maintaining controls. The aim of the course is to encourage intelligent appreciation and participation rather than simply to accumulate academic information. Consideration is also given to the ways in which such working knowledge can become a part of the experience of the pupils in our schools.

Credit: 2 semester-hours

SOCIAL STUDIES 433. *American Political Thought*

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by such men as Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

Credit: 2 semester-hours

SOCIAL STUDIES 437. *The Political Party System in the United States*

Among the topics discussed are: party organization, the political boss, the political machine, party finances, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the development of the party system, sectional politics, the farm vote, the labor vote, and the future of party government in the United States.

Credit: 2 semester-hours

Philosophy

SOCIAL STUDIES 404. *The Philosophy of History*

It is the purpose of this course to investigate the relation of history to the other social studies and also the major attempts to find the meaning of history. A brief survey is made of the leading philosophies of history.

Credit: 2 semester-hours

FIELD STUDIES IN AMERICAN LIFE

SOCIAL STUDIES 460. *Central Eastern Region*

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest asso-

ciated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states. Travel is by modern chartered motor coach, and overnight stops are made at first-class hotels. Among the places visited are: Valley Forge, Philadelphia, Baltimore, Annapolis, Washington, Arlington, Alexandria, Mt. Vernon, Fredericksburg, Richmond, Washington's birthplace at Wakefield, Lee's plantation at Stratford, Yorktown, Williamsburg, Jamestown, Raleigh, Chattanooga, Asheville, Great Smoky Mountains, Norris Dam, Jefferson's Monticello at Charlottesville, Natural Bridge, Skyline Drive in the Shenandoah National Park, Luray Caverns, Winchester, Harper's Ferry, Frederick, Gettysburg, and the Pennsylvania Dutch area around Lancaster and Ephrata.

Credit: 3 semester-hours

SOCIAL STUDIES 461. *New England and French Canada*

This field-study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels. The route covers the lower Connecticut Valley, including Hartford, Springfield, Northampton, and Deerfield; the Rhode Island cities of Providence and Newport; historic Massachusetts towns, such as Plymouth, Boston, Lexington, Concord, Salem, and Marblehead; the coast of New Hampshire and southern Maine; the White Mountains in the Mt. Washington and Franconia Notch area; the Canadian Province of Quebec, including the ancient French city of Quebec, Montmorency Falls, St. Anne de Beaupre, Montreal; the western shores of Lake Champlain, Lake George, and the Hudson River. It is an indispensable background for an understanding of Colonial and Revolutionary life and history in this region

Credit: 3 semester-hours

SOCIAL STUDIES 462. *Continental United States*

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. The trip is made in a modern chartered motor coach with overnight stops at first-class hotels. The route covers about 12,500 miles and visits 26 states and 6 National Parks. Among the major points of interest are: Gettysburg, Natural Bridge, Blue Ridge and blue grass region, Mammoth Cave, Lincoln shrines in Kentucky and Illinois, Dodge City, Royal Gorge, Pikes Peak, Denver, Rocky Mountain National Park, Taos and other Indian Reservations, Santa Fe, Petrified Forest, Painted Desert, Grand Canyon, Bryce and Zion National Parks, Hoover Dam, Los Angeles, Hollywood, San Diego, San Juan Capistrano and other Missions, Tia Juana, Santa Barbara, Sequoia and Yosemite National Parks, Monterey, San Francisco, Sacramento, Lake Tahoe, Reno, Donner Pass, mammoth redwood groves, Crater Lake, Columbia River Valley, Portland, Seattle, Mt. Rainier, Grand Coulee Dam, Spokane, Butte, Yel-

lowstone National Park, Salt Lake City, pioneer trails of Wyoming, Black Hills, Chicago, Detroit, Toronto, and Niagara Falls. All important geographic and historical features are studied under the instruction of members of the college faculty and local specialists. Write for detailed descriptive folder.

Credit: 10 semester-hours

SOCIAL STUDIES 466. *Puerto Rico and the Virgin Islands*

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes a rather thorough exploration of San Juan and its vicinity, including the University, the rain forest and the submarine gardens, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rum producing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air. It is usually offered during the Christmas holidays.

Credit: 2 semester-hours

SOCIAL STUDIES 467. *Florida*

This is a field-study course covering the Florida peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa; and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies. It is usually given during the Easter vacation.

Credit: 2 semester-hours

SOCIAL STUDIES 469. *Mexico*

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Overnight stops and meals are at the best hotels. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Pueblo, Oaxaca, Guadalajara, Quertero, Guajuato, Patzcuavo, San Miguel de Allende, San Jose, Purua, Morelia, Toluca, Taxco, and Cuernavaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in the fields of geography, history, art, architecture, archaeology, sociology, economics, and other fields.

Credit: 3 semester-hours

SOCIAL STUDIES 481. *The West Indies*

This course consists of ten days of directed travel in five countries in the Caribbean region. Transportation is by air and private car with overnight stops at the best hotels. Opportunities are given for study of geographic, historic, economic, and cultural phenomena in Puerto Rico (one day), Santo Domingo (two days), Haiti (two days), Jamaica (two days), Cuba (two days), visiting San

Juan, Cuidad Trujillo, San Cristobal, Port au Prince, Kenscoff, Kingston, Havana, and rural areas in all countries.

Credit: 2 semester-hours

SOCIAL STUDIES 484. *Gulf Coast and Lower Mississippi Valley*

This is a field-study course covering the Gulf Coast from Mobile to New Orleans. It also surveys the economic, geographic, and historical aspects of the lower Mississippi Valley. Some of the places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

Credit: 2 semester-hours

SOCIAL STUDIES 485. *Maritime Provinces of Canada*

This is a twenty-one day field study course covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspé. The route runs through Vermont and Quebec to the Gaspé. It covers Nova Scotia and Cape Breton Island thoroughly, including the spectacular Cabot Trail, and returns through Maine, New Hampshire, Massachusetts, and Connecticut. Among the places visited and topics studied are: Rivière du Loup; picturesque fishing villages along the River and Gulf of St. Lawrence; lumbering and pulp-wood operations; Gaspé; Percé with its bird sanctuary; Moncton, New Brunswick, with its tidal bore; St. John, New Brunswick, with its reversing falls; Truro; Digby; Grand Pré; Annapolis Royal; Lunenburg; Halifax; Sydney; Louisburg; Cape Breton Highlands National Park. The history of the conflicts between the French and the English for this territory, the varied geographical and scenic phenomena, and the customs and daily life of the French Canadian and English-speaking people of the region are observed.

Credit: 3 semester-hours

SOCIAL STUDIES 486. *World Survey*

This is a thirty-five day field-study course planned to give the student a comprehensive, though not detailed, vision of the kind of a world we live in with its varying culture patterns and problems. The fact that the globe can be circled and sampled in such a short time is in itself evidence of the necessity for a world point of view on the part of teachers. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in the Philippines; Hong Kong, and the Kowloon Peninsula in southeast China; Bangkok in Thailand; Calcutta, Delhi, Agra and Bombay in India; Cairo and Memphis in Egypt; Jerusalem and Damascus in the Holy Land; Baalbeck and Beirut; Istanbul; Athens, and Corinth; and Rome.

Credit: 4 semester-hours

SOCIAL STUDIES 487. *Field Studies in the Arts: European Civilization*

This field-study course gives an opportunity to study by direct observation the development of European culture from ancient Greco-Roman civilization to modern times. It deals with Byzantine, Romanesque, Gothic, Renaissance, Ba-

roque, and Rococo architecture and art and changes in art forms to modern times. The spectacular rise of European music since the Renaissance forms an important part of this study. The close relationship between the arts and historical and social changes in European civilization is examined.

Many of the greatest examples of European culture are examined, and some of the finest music is heard in original settings. (Richard Wagner Festival in Bayreuth; Netherland, Edinburgh, and Salzburg Music Festivals; and various opera and concert performances.) Master works of art and architecture are viewed in Rome, London, Paris, Amsterdam, Cologne, Munich, Florence, Siena, Venice, Assisi, Milan, etc., also the chateaux of the Loire Valley and the Bavarian Royal Castles. In 1960, the Passion Play at Oberammergau is included.

Credit: 6 semester hours

BACKGROUND STUDIES IN AMERICAN LIFE

SOCIAL STUDIES 492A AND B. *Studies in American Life—The East and the West*

These courses comprise a unit designed to give the student an integrated understanding of the United States as a cultural, historic, geographic, economic, social, and political unit and, at the same time, an appreciation of the regional differences which characterize American unity in diversity. It should be useful to those who have traveled, to those who intend to travel, and to those who, although they cannot travel, wish to broaden their knowledge of our country. The geography, the history, the literature, the art, the music, the architecture, the people, the manners and customs, the flora and fauna, the economic, social, and political problems, and the significant personalities of the regions studied are discussed and illustrated with slides, films, and other audio-visual materials. Either course may be taken without the other.

The subject matter of SOCIAL STUDIES 492A covers New England, the Central East, the South, and the Middle West east of the Mississippi River. The subject matter of SOCIAL STUDIES 492B deals with the regions west of the Mississippi; i.e., the Great Plains, the Mountain States, the Southwest, the Northwest, and California.

Credit: 2 semester-hours each

INSTITUTES AND WORKSHOPS

SOCIAL STUDIES 490A. *United Nations Institute*

This course covers four and one-half hours per day for ten consecutive days excluding Saturday and Sunday. It consists of basic lectures on factual backgrounds by the instructor, supplementary lectures by visiting lecturers from the United Nations and other organizations, discussions, workshop and library projects, demonstrations of the use of audio-visual materials, and field trips to the United Nations. Included among the subjects studied are: the national state system, war and peace, world organizations (past, present, and proposed), the na-

tional armaments problem, international law, the international police proposal, pacific methods of settling international disputes, and the outlook for international cooperation.

Credit: 3 semester-hours

SOCIAL STUDIES 490B. *The United Nations and American Foreign Policy*

The purpose of this course is to help provide an understanding of the United Nations in its operation as a basis for American foreign policy. In that the Charter of the United Nations forms the backbone of American cultural, economic and military cooperation with other nations, its interpretation and the application of our aid to needy people open a wide area of disagreement within the nation. Following the principle that American foreign policy should rest upon an intelligent understanding on the part of the electorate and working within the framework of the policy of the State Board of Education with regard to controversial issues, the United Nations Institute deals with the strong as well as the weak aspects of this newly created world organization. This Institute serves the needs of teachers of all grades, students of foreign policy, the public at large, as well as visitors from other lands who are here to study the ways of American democracy. It is available to students who have completed the requirements for SOCIAL STUDIES 490A, *United Nations Institute*, or the equivalent.

Credit: 3 semester-hours

SOCIAL STUDIES 490C. *The Specialized Agencies of the United Nations*

The purpose of this course is to give the student an opportunity to learn about the various activities of the specialized agencies of the United Nations. The course deals with the positive activities of the United Nations in the various areas of human welfare. Visiting lecturers from the agencies themselves and from areas of the world receiving such help are a regular part of the class work. Trips to the New York offices of these agencies and individual research make up the balance of the work for this course.

SOCIAL STUDIES 490A, *United Nations Institute*, or its equivalent is a prerequisite for this course.

Credit: 3 semester-hours

SOCIAL STUDIES 490D. *The United States and World Affairs*

The purpose of this course is to give the student an opportunity to make a thorough survey of the leading problems in world affairs. Visiting lecturers from agencies concerned with the problems of today's world supplement the basic information supplied by the regular members of the Institute staff. Included among the subjects studied are: Underdeveloped areas of the world, technical assistance, international trade and cultural interdependence. Special emphasis is placed on the relations of the United States with such areas of the world as the Far East, Eastern Europe, the Middle East, Western Europe, and Latin America.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to the conventional lectures, this course features the showing of the latest films in the field of world affairs, field trips to the United Nations and to foreign areas of New York, exhibits of teaching materials, demonstrations of teaching techniques and materials, folk singing, and folk dances suitable for classroom use.

Credit: 3 semester-hours

SOCIAL STUDIES 490E. *Latin America, a Survey*

The purpose of this course is to give the student an opportunity to make a thorough survey of Latin America. Visiting lecturers from agencies concerned with Latin American affairs supplement the basic information supplied by the regular members of the Institute staff. Included among the subjects studied are: Geographic setting and influences, pre-European cultures, exploration and settlement, independence, the Monroe Doctrine, economic colonialism, Pan-Americanism, present-day Latin America, United States relations with Latin America, and Latin America and the United Nations.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to conventional lectures, this course features the showing of the latest films on Latin America, field trips to the United Nations and Latin American centers of New York, exhibits of materials suitable for teaching, demonstrations of teaching techniques and materials, folk singing, and folk dances suitable for classroom use.

Credit: 3 semester-hours

SOCIAL STUDIES 490F. *Russia in the Modern World*

The purpose of this course is to give the students an opportunity to study the development of modern Russia and the impact of its emergence as a world power. Particular attention is devoted to the role played by the geographical and historical forces that influenced Soviet foreign policy. The course meets three hours a day for each of fifteen days. Visiting lecturers from agencies concerned with Russian affairs supplement the basic information supplied by the regular members of the Institute staff. Included among the topics studied are: The nature and source of Soviet power, land and people of the Soviet Union, the role of the Communist Party, United States relations with Russia, Russia in the United Nations, Russian interest in the Far East and the Middle East, and the Cold War.

This course is designed primarily for teachers who feel the need for accurate background information and improved teaching materials and techniques for use in their classrooms. In addition to conventional lectures, this course features the showing of the latest films on the Soviet Union, field trips to New York City, exhibits of materials suitable for classroom use and demonstrations of teaching techniques.

Credit: 3 semester-hours

SOCIAL STUDIES 490G. *Western Europe at Mid-Century*

The free nations of Western Europe are examined for their influence upon world affairs as well as for the ways in which they are affected by developments on the international scene. They are studied as the point of East-West contact and as a center of East-West rivalry. Particular attention is paid to the changing status of Western European powers and to the geographical, economic, and historical forces which are bringing about this change. Included among the areas studied are: political and governmental institutions; geographic influences; intra-European cooperation; economic bases of politics and history; pertinent historical trends and developments; social and intellectual developments; and, the role of tradition and provincialism. Among the nations considered are: the United Kingdom, France, the Benelux countries, West Germany, the Scandinavian countries, Italy, Portugal, Spain, and Ireland.

This course is designed primarily for teachers who feel the need for up-to-date background information and improved teaching materials and techniques for use in their classes. All teachers interested in world affairs are given the opportunity to build up a personal background of information and understanding. Background lectures, small study groups, field trips to New York City, films and exhibits of materials suitable for classroom use are included in the program. Spokesmen for the various national points of view supplement the basic information presented by the regular members of the Institute staff.

Credit: 3 semester-hours

SOCIAL STUDIES 491A. *Workshop in Citizenship Education, Part I*

The purpose of this workshop is to present a study of what has been done in some of the many projects in citizenship education throughout the country. Attention is given to programs and practices already in use in the schools, and advantage is taken of the state-wide project in collecting from the schools experiences in education for character and citizenship. New means for citizenship education are sought and methods of valuation are reviewed. Experience in the group processes essential to democratic action is provided. Each participant in the workshop works on actual plans for carrying out such education in the school and the classroom.

Credit: 2 semester-hours

SOCIAL STUDIES 491B. *Workshop in Citizenship Education, Part II*

Membership in this workshop course is limited to those who have completed SOCIAL STUDIES 491A, and participants in this advanced workshop meet and work with members of the SOCIAL STUDIES 491A workshop. On the basis of previous experience, each member of the SOCIAL STUDIES 491B group is expected to work out several laboratory practices or similar projects for use in the classroom or the school.

Credit: 2 semester-hours

SOCIAL STUDIES 499. *Introduction to Chinese Culture*

A number of authorities introduce first-year students to the rise, growth, and maturing of Chinese civilization, as well as to the fundamental problems of China today, including the conflict of ideologies. The course is given in twelve days. Each day there are two hours of lectures in the morning; after lunch a period of forty-five minutes is devoted to informal talks including further discussion on Chinese music, philosophy, Chinese school days, festivals, and calligraphy. Some time is also given to the singing of Chinese songs and the showing of motion pictures. During the two-hour workshop period the students prepare their projects, teaching units, and background material under the direction of faculty members.

Credit: 3 semester-hours

SOCIAL STUDIES 496A. *The Chinese Society*

This course is an intensive study of the formation of the Chinese people, their collective life, and the interaction of natural and human forces with the resultant social organizations from early times to the present. Particular emphasis is placed upon the development of social institutions, including the family, labor guilds, educational systems, and religious institutions, as well as their transformation and modernization under the impact of different forces from the West. There are twenty-four hours of lectures in the morning, and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

SOCIAL STUDIES 496B. *China: The Evolution of a Nation*

This course is an intensive study of the Chinese civilization, the forces underlying the development of the national character of the Chinese people, their contacts and conflicts with other peoples and cultures from historical times to the present. Because of its voluminous material, this course does not attempt to cover the whole span of Chinese history, but it is an integrated presentation of the maturing of the Chinese people as a nation. There are twenty-four hours of lectures in the morning, and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*

Credit: 3 semester-hours

SOCIAL STUDIES 497. *Chinese Philosophy*

This course shows how the ancient philosophies, Confucianism, Taoism, Buddhism, Mohism, can be applied to the China of today and how they affect modern Chinese thought. There are twenty-four hours of lectures in the morning and round-table discussion and library work in the afternoon.

Prerequisite: SOCIAL STUDIES 499, *Introduction to Chinese Culture*, or equivalent course in philosophy

Credit: 3 semester-hours

SOCIAL STUDIES 498. *China and the Far East*

This course presents to the student a factual and up-to-date analysis of the forces that are operating in the Far East and shows how these forces may affect future developments in this critical area of the world. China, with its people as a key area in the Far East, is interpreted in terms of current economic, political and cultural developments. Recognized experts from the various countries in the Far East present problems from the standpoint of their experience and background. The course itself is synthesized by a course director who is a serious student of China and its neighbors.

Credit: 3 semester-hours

THE DEPARTMENT OF SPEECH

The Speech Major

The Speech Department at Montclair recognizes the joint contribution of both the speech sciences and the speech arts. Thus, the speech major program prepares the prospective teacher to do speech correction and improvement work with students on all grade levels, and to teach and direct dramatics, public speaking, oral interpretation, and general speech throughout the secondary school. The program meets New Jersey certification requirements in two areas: (1) Teaching the Speech Defective K-12 and (2) Teaching Speech and Dramatics from grades 7 through 12. Clinical membership in the American Speech and Hearing Association may be attained.

Class work is supplemented by field trips, speech surveys in schools in New Jersey communities, laboratory teaching experience with fellow students and children who come to the campus for therapy services in the Speech and Hearing Center, and general speech activity of all types. Internship programs in speech and hearing rehabilitation are available through affiliation with Mountainside Hospital, the North Jersey Training School, and other special centers and institutions. Players, a society open to the entire student body, provides extensive opportunities in the field of dramatics. The Montclair Zeta Chapter of the national speech correction honor society, Sigma Alpha Eta, is one of the country's most active organizations in that area.

SPEECH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization, I</i>	3	Soc. St. 100B <i>Dev. of World Civilization, II</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Music 100 <i>Music Appreciation</i>	2
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2	Sci. 100A <i>Physical Science or</i>	4
SPEECH 103 <i>VOICE & SPEECH IMPROVEMENT</i>	3	Sci. 100B <i>Biological Science</i>	3
SPEECH 105A <i>INTRO. TO DRAMATIC PROD., A</i>	2	Eng. 100C <i>Fundamentals of Writing</i>	3
SPEECH 106 <i>INTRO. TO ORAL INTERPRETATION</i>	2	SPEECH 105B <i>INTRO. TO DRAMATIC PROD., B</i>	2
		SPEECH 104 <i>INTRO. TO PHONETICS</i>	3
	15½		17½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 200A <i>Contemporary American Life, I</i>	3	Soc. St. 200B <i>Contemporary American Life, II</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i> ..	3
Sci. 100C <i>The Earth Sciences</i>	2	Elective	2
Electives	3	*a) SPEECH 438/CREATIVE DRAMATICS or	2
*a) SPEECH 435 STAGECRAFT or	2	b) Ed. 473 ELEM. SCHOOL LANG. ARTS SPEECH 204 INTRO. TO PUBLIC SPEAKING	2
b) Ed. 472 ELEM. SCHOOL CURRICULUM		SPEECH 209 SPEECH CORRECTION: THEORIES AND PRACTICES	3
SPEECH 208 ANATOMY & PHYSIOLOGY OF THE VOCAL & AUDITORY MECHANISMS	3		
	16 1/2		15 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Tchng.</i>	3
Math. 300 <i>Social Uses of Math.</i>	2	H.Ed. 100 <i>Healthful Living</i>	2
Elective	2	Eng. 100G <i>Western World Literature</i>	3
#Ed. 452 <i>Psych. and Ed. of the Handicapped</i>	3	SPEECH 468 MEASUREMENT OF HEARING	3
SPEECH 410 SPEECH PATHOLOGY	2	SPEECH 457 DIRECTING THE ASSEMBLY PROGRAM	2
SPEECH 461A PRACTICUM IN SPEECH CORR., I	2	SPEECH 461B PRACTICUM IN SPEECH CORR., II	2
SPEECH 456 PLAY DIRECTION	2	Elective	2
	16		17

#(Education elective suggested for Speech majors and minors)

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 STUDENT TEACHING IN SPEECH ARTS & SCIENCES	8
Lang. 300 <i>Foundations of Language</i> ..	2	Elective Math or Science	2
Math. 400 <i>Educational Statistics</i>	2	Elective Humanities	2
Elective	3	*a) SPEECH 448 CHORAL SPEAKING or	2
SPEECH 417 METHODS OF TEACHING SPEECH AND DRAMATICS	3	b) SPEECH 469 AUDITORY REHABILITATION	
*a) SPEECH 462 GROUP DISCUSSION & LEADERSHIP or	3		
b) SPEECH 412 SPEECH DIAGNOSIS or SPEECH 411 ADV. SPEECH PATHOLOGY			14
	16		

A specialization of 53 s.h. in Speech qualifies majors for a certificate in: 1) Teaching of Speech in Secondary Schools; 2) Teaching of the Speech Defective, Kindergarten through 12th grade.

* Each major must declare a nine point concentration in either: (a) Speech and Dramatics, or (b) Speech Correction, beyond the core of courses required of all speech majors (44+9=53 S.H.)

SPEECH MINOR

SOPHOMORE YEAR

Fall Semester	S.H.	Spring Semester	S.H.
*Speech Arts elective (see below)	2	Speech 104 <i>Introduction to Phonetics</i>	3
		Speech 209 <i>Speech Correction: Theories and Practices</i>	3

JUNIOR YEAR

Speech 204 <i>Intro. to Public Speaking</i>	2	Speech 106 <i>Intro. to Oral Interpretation</i>	2
Speech 461A <i>Practicum in Speech Correction, I</i>	2	*Speech elective (see below)	4

SENIOR YEAR

Speech 417 <i>Methods of Teaching Speech and Dramatics</i>	3
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Total semester-hours required: 21

* Speech elective from among the following courses:

Speech 105A <i>Intro. to Dramatic Prod., A</i>	2	Speech 457 <i>Directing the Assembly Program</i>	2
Speech 435 <i>Stagecraft</i>	2	Speech 448 <i>Choral Speaking</i>	2
Speech 456 <i>Play Direction</i>	2	Speech 461B <i>Practicum in Speech Correction, II</i>	2
Speech 462 <i>Group Discussion and Leadership</i>	3	Speech 438 <i>Creative Dramatics</i>	2
Speech 470 <i>Argumentation and Debate</i>	3	Speech 410 <i>Speech Pathology</i>	2
		(if offered in spring)	
		Speech 105B <i>Intro. to Dramatic Prod., B</i>	2
		Speech 464 <i>Psychology of Oral Communication</i>	2

Sequences of Courses in Speech Minor

A. Required Sequences

Speech 100D during the freshman year *or* Speech 103 during the first half of the sophomore year—prerequisite to other speech courses
 Speech 104 and 209 before Speech 461A

B. Recommended Sequences

Speech 204 before Speech 449, Speech 462, Speech 470
 Speech 105A and 105B before Speech 435 or 456

Transfer students should confer with the Chairman of the Speech Department regarding courses taken elsewhere which can be accepted as fulfilling any of the above requirements.

Recommended Sequence for Limited Specialization

Dramatics elective (see list above)	2
Speech 104 Introduction to Phonetics	3
Speech 209 Speech Correction: Theories and Practices	3
Speech 204 Intro. to Public Speaking	2
Total	10

The Speech Major—The First Two Years

During the first two years the speech major is given experience in elementary courses in the speech arts and sciences.

SPEECH 103. *Voice and Speech Improvement*

This course affords an opportunity for the students to develop their own voice and speech techniques and to eliminate faults. Consideration is also given to the procedures used in helping others to improve voice and speech patterns.

Credit: 3 semester-hours

SPEECH 104. *Introduction to Phonetics*

This course gives the students an acquaintance with the science of speech sounds. They learn to use the International Phonetic Alphabet as well as diacritical marks of lexicographers. The symbols are used both in transcribing speech and in reading aloud from transcriptions.

Credit: 3 semester-hours

SPEECH 105A AND 105B. *Introduction to Dramatic Production*

This course is designed for speech majors and others who want to have a general knowledge of the various aspects of producing plays. The work of the first semester is devoted to the technical aspects in the production of a play; the work of the second semester covers the problems of the performer in a play. During the first half of the course topics covered are theater structure; the business side of production; the technical problems of scenery, lighting, properties, and costuming. At the conclusion of the first semester the students make practical use of the material by handling the stage management of the one-act plays being produced by students in the course in play direction. The work of the second semester covers beginning problems and techniques of acting and a concentrated study of make-up. The work is concluded by a performance of a scene or character rehearsed in class and made up by the performer himself for his final demonstration.

Credit: 2 semester-hours each

SPEECH 106. *Introduction to Oral Interpretation*

This course is organized to increase the student's appreciation of literature in the area of his special interest. The emphasis is on individual classroom performances followed by informal critiques, and the development of a repertory for specific classroom purposes.

Credit: 2 semester-hours

SPEECH 204. *Introduction to Public Speaking*

The student studies techniques for preparing and delivering effective informative, persuasive, and entertaining speeches. He is given several opportunities to address the class and enter into informal critiques, as well as moderate one program.

Credit: 2 semester-hours

SPEECH 208. *Anatomy and Physiology of the Vocal and Auditory Mechanisms*

This course presents a study of the structures of the vocal and auditory mechanisms and of their functioning in producing speech sound and in detecting sound. Consideration is given to the fundamental principles of the physics of sound.

Credit: 3 semester-hours

SPEECH 209. *Speech Correction: Theories and Practices*

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary, and secondary-school levels. Consideration is given to the following: (1) subject-matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations with children who have faulty patterns of speech or whose speech development has been retarded are provided.

Credit: 3 semester-hours

SPEECH 435. *Stagecraft*

This workshop course provides training in constructing and painting of scenery, and lighting the stage. A minimum of twelve clock hours in the scene shop is required.

Credit: 2 semester-hours

SPEECH 438. *Creative Dramatics*

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high-school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts in the total educational picture. Student participation in planning and presenting demonstrations with children is an essential part of the course.

Credit: 2 semester-hours

THE THIRD YEAR

During the third year the speech major is introduced to speech-correction practicum under supervision, and speech and hearing rehabilitation. Advanced courses in general speech and dramatics are also included.

SPEECH 410. *Speech Pathology*

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances including severe stuttering, dysphonia, laryngectomy, cleft-palate, cerebral palsy, and aphasia. Emphasis is placed upon methods of diagnosis, evaluation, and rehabilitation.

Credit: 2 semester-hours

SPEECH 456. *Play Direction*

This course covers the choosing and casting, as well as directing, of plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is

prepared. Whenever possible, this play is given publicly before a student audience. This course complements SPEECH 435.

Credit: 2 semester-hours

SPEECH 457. *Directing the Assembly Program*

It is the purpose of this course to prepare students to organize and to conduct assembly programs and similar activities. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares a detailed script for one assembly or commencement program.

Credit: 2 semester-hours

SPEECH 461A. *Practicum in Speech Correction, I*

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy, and teach under supervision.

Credit: 2 semester-hours

SPEECH 461B. *Practicum in Speech Correction, II*

Additional opportunities for practical experience with children and high-school students who have speech problems are provided in this course. Provisions are made for qualified students to participate in specialized laboratory experiences which include audiometric testing, planning and supervising speech therapy for small groups of children, demonstrating model lessons for beginning students, and interviewing applicants for admission to the laboratory.

Credit: 2 semester-hours

SPEECH 468. *Measurement of Hearing*

A comprehensive study of the measurement of hearing is made in this course with attention being given to the educational implications of impaired audition and deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism are considered as well as hearing tests, principles and techniques of screening tests, interpretation of test results, types and uses of hearing aids, and educational procedures for the habilitation of the hard-of-hearing or deaf child. Demonstrations and supervised practice in administering pure-tone audiometer tests are provided.

Credit: 3 semester-hours

THE FOURTH YEAR

The course in Methods in the Teaching of Speech and Dramatics presents a review of the principles learned in previous specialized courses. With this overview there emerges a clear picture of the place of speech in the educational pattern, and a philosophy which will give depth to teaching throughout one's pro-

fessional career. Advanced courses in the speech arts and sciences are offered. Student teaching is equally divided between speech and dramatics in the secondary school and speech correction in the elementary schools.

SPEECH 411. *Advanced Speech Pathology*

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers. In addition to two hours of class lecture and discussion, students are expected to spend two hours a week, for twelve weeks, on a rotating internship basis at: (a) a cerebral palsy center, (b) a training class for the mentally retarded, (c) a rehabilitation center or Veterans' Administration Hospital, and (d) a hospital speech therapy department.

Prerequisite: SPEECH 410 or equivalent

Credit: 3 semester-hours

SPEECH 412. *Speech Diagnosis*

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology to be used in providing speech rehabilitation services to children and adults with speech and language disorders is evolved.

Credit: 3 semester-hours

SPEECH 417. *Methods in the Teaching of Speech and Dramatics*

In this course a study is made of the objectives of speech education at each grade level; of the approaches, problems, materials, textbooks, and techniques in specific speech areas; of modern trends in instruction, and of the integration of speech with other academic departments of study.

Credit: 3 semester-hours

SPEECH 448. *Choral Speaking*

As members of a speaking choir, students acquire skill in interpreting various forms of literature suitable for group practice. Consideration is given to their use in the various grade levels in teaching. Students prepare a group of selections suitable for their particular interest and purpose.

Credit: 2 semester-hours

SPEECH 462. *Group Discussion and Leadership*

The purpose of this course is to study the principles of democratic discussion and the methods employed in guiding and participating in the informal group

discussion, and in the panel, symposium, lecture, and debate forum. Techniques and uses of parliamentary procedure are also considered. Frequent opportunities in the application of the principles and methods studied are given through student participation in the various types of discussion programs dealing with community and national problems of significance. Attention is also given to the ways in which group discussion may be used as an effective teaching method in the general school curriculum.

Credit: 3 semester-hours

SPEECH 469. *Auditory Rehabilitation*

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficiency in speech reading as a receptive language process are discussed. In addition, principles of auditory training are studied as means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

Credit: 2 semester-hours

ELECTIVES

SPEECH 436. *Fundamentals of Stage Lighting*

The purpose of the course is to analyze the functions of light on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the Memorial Auditorium at the College, which houses modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditoriums in which they may work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course.

Prerequisite: SPEECH 105A or SPEECH 435 or permission of the instructor

Credit: 3 semester-hours

SPEECH 437. *Dramatic Production Workshop*

This summer-session course is designed for those students desiring a comprehensive introductory course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. Classes meet one hour daily in addition to sixty clock hours of laboratory assignments in connection with the summer-theater program. The course may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a prerequisite to matriculation for the Master's degree in speech.

Credit: 4 semester-hours

SPEECH 439. *Workshop in Speech Correction*

This course is especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in speech. Four areas in the speech sciences are offered on a workshop basis requiring attendance during all or part of the six-week summer session, depending upon the number of units elected.

PART I**SPEECH 439A. *Phonetics***

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

Credit: 2 semester-hours

PART II**SPEECH 439B. *Anatomy and Physiology of the Auditory and Vocal Mechanisms***

The work of this course entails a detailed study of the larynx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

Credit: 2 semester-hours

PART III**SPEECH 439C. *Speech Pathology***

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

Credit: 3 semester-hours

PARTS IV AND V**SPEECH 439D. *Practicum in Speech Correction*****SPEECH 439E. *Advanced Practicum in Speech Correction***

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units.

Credit: 1 semester-hour for SPEECH 439D
1 semester-hour for SPEECH 439E

SPEECH 449. *Advanced Public Speaking*

This is an advanced course in the theory and practice of public speaking. It provides opportunity for training in the more complex speech skills, especially in the techniques of leadership in speech situations.

Prerequisite: SPEECH 204 or the equivalent

Credit: 2 semester-hours

SPEECH 454. *Training the Speaking Voice*

This is a course in the study of the problems of speech, the development of a pleasant speaking voice with precision in diction, and the application of speech skills to practical speaking situations.

Credit: 2 semester-hours

SPEECH 461C. *Advanced Practicum in Speech and Hearing*

This course provides students with further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations; (2) work with the parents of children who have speech disorders; and (3) assist the beginning student-speech therapist in planning and carrying out therapy sessions.

Prerequisite: SPEECH 461A and B

Credit: 2 semester-hours

SPEECH 463. *Audio-Visual Aids in Teaching Speech*

The aim of this course is to equip prospective teachers to understand the desirable characteristics; capabilities; and all possible uses of charts, models, projection equipment, and magnetic and disc recorders available for the teaching of speech. The distribution, cost, operation, servicing, and storing of instruments and of supplies are also considered.

Credit: 2 semester-hours

SPEECH 464. *Psychology of Oral Communication*

This course is divided into three major units: (1) speech and personal adjustment, (2) the psychology of children who have problems in oral communication, and (3) programs and problems in the education and rehabilitation of handicapped children who have speech and/or hearing disorders. Consideration is given to ways in which psychologies of learning, psychoanalysis, and general semantics have influenced the areas of speech pathology and speech therapy.

Credit: 2 semester-hours

SPEECH 465. *Speech Arts Activity*

Credit is given for some supervised speech-arts activity, such as: playing a major role in a major production; directing a three-act play or its equivalent; giving a public play reading or lecture recital; directing a series of assembly programs; or directing and producing a series of radio programs.

Credit: 1 semester-hour

SPEECH 466. *Speech Development: Improvement and Reeducation*

This course is intended for superintendents, principals, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found on the kindergarten, elementary, and secondary-school levels; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of setting up and integrating speech education in school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project.

Credit: 2 semester-hours

SPEECH 467. *Oral Interpretation for the Teacher*

This course is organized as a laboratory to help the teacher develop his potentialities in oral reading. Each student is given many opportunities to read aloud and to participate in informal critiques. Assistance is given in compiling a repertory of selections most useful in daily teaching.

Credit: 2 semester-hours

SPEECH 470. *Argumentation and Debate*

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentative techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

Credit: 3 semester-hours

THE DEPARTMENT OF GEOGRAPHY

Geography is a science. On a scientific basis it deals with places and their chief attributes, the topography, the rocks and minerals, the climate, the natural vegetation and animal life, the soils, and increasingly with the role of man, his culture, his works, his relationship to the earth.

As a consequence, geography occupies a unique place among the natural and social sciences. It examines man in the totality of his physical-cultural milieu and brings the thought, techniques, and tools of these disciplines to bear on a particular problem or area.

The geographer of today must be a trained observer of the physical aspects of our environment as well as an astute student of the social sciences. Therefore, the program for this Department stresses sound training in fundamental geography, in the principles of cultural geography, and in analysis of the geographic area.

Courses are arranged in sequence to provide students with an orderly and progressive road to the mastery of geographical techniques, tools, and methods. Major emphasis is placed upon the detailed study of maps and in experiences in the field.

The Department of Geography attempts not only to prepare teachers of geography for the junior and senior high schools, but also to: (1) contribute to the preparation of teachers of science and other subjects; (2) provide fundamental courses for the student of history, economics, and related subjects; (3) furnish a basis of study for enjoyment of recreation and travel; and (4) afford, as a part of general education, a broad cultural background for the understanding of our times.

General Education Course

SCIENCE 100C, *The Earth Sciences*, is required of all students.

The Geography Minor

The following course requirements constitute the geography minor:

SOPHOMORE YEAR

<i>Semester I</i>	<i>S.H.</i>	<i>Semester II</i>	<i>S.H.</i>
Geog. 201 <i>Climatology</i>	3	Geog. 204 <i>Soils, Natural Vegetation, and Land Utilization</i>	3

JUNIOR YEAR

Two of the following:	Geog. 302 <i>Economic Geography</i>	3
Geog. 202 <i>Regional Geography of Anglo-America</i>	3	
Geog. 304 <i>Geography of Europe</i>	3	
Geog. 305 <i>Geography of Asia</i>	3	

SENIOR YEAR

One of the following:	
Geog. 421 <i>Population Problems of the World</i>	3
Geog. 419 <i>Geography of the Soviet Union</i>	3
And	
Geog. 401 <i>The Teaching of Geography in Secondary School</i>	3

Total: 21 semester-hours

THE FIRST YEAR

The work of the first year in geography aims through a study of geographic principles to give the student an accurate conception of the subject as a field of scientific thought; to give an appreciation of the importance of geography in education; to serve as a unit of general culture; and to establish fundamental concepts of the subject that will be of value for further study of geography.

SCIENCE 100C. *The Earth Sciences*

For a description of this course, see page 53.

Credit: 2 semester-hours

GEOGRAPHY 100. *Human Geography*

The course introduces the student to the disciplines of geography and anthropology. It is primarily concerned with people and with the adjustment they

make to their environment both physical and cultural. Three cultures are critically examined: the Indians of the Plains, the Cotton South, the American Manufacturing Belt. Geographical environment, the economy, social organizations, and culture changes are stressed in each culture.

Credit: 2 semester-hours

GEOGRAPHY 101. *Principles of Geography*

This course is designed to introduce the student to the science of geography. It is based upon a world-wide survey of the physical and cultural elements of the geographic environment. Emphasis is placed upon the adjustments that man makes to that environment, the challenges that it offers, and the responses that are made. Much effort is devoted to the study of maps and their uses.

Credit: 2 semester-hours

GEOGRAPHY 103. *Introduction to Cultural Anthropology*

This course introduces the student to work in anthropology. It is concerned primarily with man and his works. Human origins and prehistoric cultures are viewed against the earth background. The concepts of race and culture are examined and defined; the material and non-material traits of primitive societies are analyzed critically; the regional approach is stressed; and emphasis is placed on the delimitation of culture areas. The course provides the fundamentals necessary for future work in cultural geography and anthropology.

Credit: 3 semester-hours

THE SECOND YEAR

The courses for the sophomore year are arranged to give the students a thorough grounding in the physical background of the subject, and a development of geographic thinking that will aid them in clear reasoning and expression in working out the relationships of man to his natural environment.

GEOGRAPHY 201. *Climatology*

This course is divided into two sections: meteorology and climatology. Section one stresses the basic weather elements—temperature, pressure, precipitation, atmospheric circulation, storms. Aspects of weather forecasting are discussed, and weather maps are studied. Section two introduces the student to the major climatic subdivisions of the earth. These are analyzed in detail. Variations in climatic types are emphasized. In both sections use of instruments, adiabatic charts, map interpretation, and competence in the use of climatic classification systems are stressed where necessary.

Credit: 3 semester-hours

GEOGRAPHY 204. *Soils, Natural Vegetation, and Land Utilization*

This course is designed to introduce students to the edaphic and floral factors in geographical analysis. World-wide distribution patterns are established for

ach. Their significance to man and man's utilization of them are assessed critically.

Credit: 3 semester-hours

ELECTIVES

GEOGRAPHY 203. *Physiography of North America*

This course is designed to review basic principles of geomorphology, examine critically the regional approach in the earth sciences, and describe and delineate the physiographic regions of North America. Aspects of climate, soil, flora, and fauna are also treated as bases for regional classification. Topographic map interpretation is stressed. The course provides the physical base for future cultural studies of the continent.

Credit: 3 semester-hours

GEOGRAPHY 205. *Economic Life of Primitive Peoples*

This course introduces the student to the intimate relationships that exist between geography, anthropology, and economics. Cultures are examined against the earth's background. Gathering, hunting, fishing, herding, and agricultural cultures are analyzed critically. Particular attention is paid to the domestication of plants and animals and the economic lifeway of specific peoples.

Credit: 3 semester-hours

THE THIRD AND FOURTH YEARS

In the work for the junior and senior years there is emphasis upon the subject-matter in regional and economic geography necessary for teaching geography in the secondary schools. Also more attention is given to the professionalization of the subject-matter than in either of the previous years; that is, the techniques of presenting material, the use of geographical tools, and the problems of testing are dealt with in the treatment of the subject-matter in hand.

GEOGRAPHY 202. *Regional Geography of Anglo-America*

This course is designed as a regional analysis of Canada, Alaska, and the United States. It serves as an introduction to and a desirable foundation for the study of other continental areas. Emphasis is placed upon the human activities in relation to their natural environment. The student is introduced to the physiographic, climatic, edaphic, and vegetative patterns of regions as well as the cultural and ecological factors. Anglo-America's place in the world economy is analyzed critically.

Credit: 3 semester-hours

GEOGRAPHY 302. *Economic Geography*

This course is designed to introduce students to the basic principles of economic geography. Special emphasis is placed upon the development of agricul-

tural and industrial societies. The importance of the world's food resources, the fossil fuels, the iron and steel industry, the location of industry, transportation, and trade are all stressed. All are viewed and interpreted in terms of the geographic environment.

Credit: 3 semester-hours

GEOGRAPHY 304. *Geography of Europe*

This course is designed as a regional analysis of Europe. It examines critically the physical and human aspects of the continent's geography. Relations between the European states are discussed, and Europe's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 305. *Geography of Asia*

This course is designed as a regional analysis of Asia. It examines critically the physical and human aspects of the continent's geography. Relations between the Asiatic states are discussed, and Asia's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 401. *The Teaching of Geography in Secondary Schools*

This course is designed to aid prospective teachers of geography to gain insight into the method and philosophy of their field; it stresses the problems of teaching the subject matter of geography to secondary-school children. Particular emphasis is placed on the nature of geography, visual aids, reading the landscape, and the teaching of the regional and systematic aspects of the discipline.

Credit: 3 semester-hours

GEOGRAPHY 419. *Geography of the Soviet Union*

This course is designed as a regional analysis of the Soviet Union. It examines critically the physical and human aspects of Soviet geography. Particular emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 421. *Population Problems of the World*

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

Credit: 3 semester-hours

OTHER COURSES IN GEOGRAPHY**GEOGRAPHY 303. *Regional Commercial Geography of the Americas***

This course comprises a regional study of the physical geographic factors which contribute to the production, distribution, and marketing of the resources of the western hemisphere. The location of trade routes and commerce centers in relation to the physical features of the earth's surface is considered. Emphasis is placed on the main industries resulting from the utilization of the natural resources, on the recent trends and shift of industries, and the world position of the nations of the Americas in the production and exchange of commodities.

Credit: 3 semester-hours

GEOGRAPHY 306. *Geography of Latin America*

This course is designed as a regional analysis of Latin America. It examines critically the physical and human aspects of the continent's geography. Relations between the Latin American states are discussed as are relations with the United States. Latin America's place in the world economy is also analyzed.

Credit: 3 semester-hours

GEOGRAPHY 307. *Cartography*

This is the basic course in cartography. Students master the use of cartographic instruments and attempt to understand the principles underlying the common types of map projections. Map interpretation and map usage and construction are emphasized. This course meets for one lecture hour and two laboratory hours.

Credit: 2 semester-hours

GEOGRAPHY 405. *Urban Geography*

The student is introduced to the complex forces that have been and are responsible for the intense concentration of political, social, and economic activities within a small area. This area is then analyzed from the point of view of its evolution, morphology, and function. The changing characteristics of our cities, suburbanization, city-service areas, and city-hinterland interrelationships are also investigated. Special emphasis is placed upon research methods and source materials.

Credit: 3 semester-hours

GEOGRAPHY 406. *Geology*

This course deals with the earth and its geographic, stratigraphic, and structural development throughout geologic time; the record of the evolution of life is interpreted through a study of rocks and fossils.

Credit: 2 semester-hours

GEOGRAPHY 408A AND 408B. *Political Geography*

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic

factors influencing racial, religious, commercial, and political adjustment between nations.

Credit: 2 semester-hours each

GEOGRAPHY 409. *Economic Geography of the British Isles*

A comprehensive treatment of the resources of the British Isles is given, and the influence of the natural environment upon the utilization of those resources in the economic, social, and political development of the British Empire is evaluated.

Credit: 2 semester-hours

GEOGRAPHY 410. *Economic Geography of Caribbean America*

This is a study and interpretation of the major and important minor economic areas of Caribbean America in relation to the natural environment. Attention is also given to the historical factors which have played a part in the economic and social life of the people.

Credit: 2 semester-hours

GEOGRAPHY 411. *Historical Geography of the United States*

This course provides an opportunity for students of history, geography, and related disciplines to become familiar with the major principles of historical geography. It emphasizes the geographic factors pertinent to an understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Particular attention is paid to source materials, to the cartography of specific times, and to geographical lore and thought.

Credit: 3 semester-hours

GEOGRAPHY 412. *Geography of Africa*

This course includes a topical and regional study of Africa. Special emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined critically in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

Credit: 3 semester-hours

GEOGRAPHY 413. *Economic Geography of South America*

This course constitutes a study of the influence of the natural environment upon production and utilization of resources in the economic, social, and political development of the various nations of South America.

Credit: 2 semester-hours

GEOGRAPHY 414A AND 414B. *Advanced Economic Geography*

This course is a study of the influence of the physical environment upon the production of, the trade in, and the utilization of the important agricultural, forest, mineral, and sea products, and the manufactured commodities of the world.

Credit: 2 semester-hours each

GEOGRAPHY 416. *Conservation of Natural Resources*

This course provides an opportunity for students of the social and physical sciences to study the natural resources of the United States. Exploitation and conservation are both stressed. Our major resources are reviewed in terms of use, needs, and future developments. Consideration is given to the growth of legal and social awareness of the need for conservation practices in America.

Credit: 3 semester-hours

GEOGRAPHY 418. *Regional Geography of North America*

This course constitutes a detailed regional treatment of the continent of North America. Emphasis is placed upon the human activities of the various regions in relation to their natural environment and the relations of the regions to each other. Attention is given to the techniques of presenting the material and the use of geographic tools in the treatment of the subject-matter.

Credit: 2 semester-hours

GEOGRAPHY 420. *Field Geography and Conservation*

This course constitutes a study of the relation between relief features of northern New Jersey, the location of natural resources, and the way in which land use and population distribution follow these patterns. Emphasis is given to the reading and interpretation of topographical maps and aerial photographs and to a study of the United States Geological and Soil Surveys of this region. By means of an actual land-use survey the student comes to appreciate the problems of conservation as they grow out of man's use of natural resources.

Credit: 2 semester-hours

GEOGRAPHY 422. *Geography of the American Indian*

This course is designed to survey the culture of the American Indian (from the Ice Age to the Reservation) in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet for the first time, and culminates with discussion of the Indian problems of the present day. It serves to introduce the student to methods employed in interdisciplinary attacks upon cultural problems. The views of the geologist, archaeologist, cultural anthropologist, cultural historian, as well as the geographer are critically examined.

Credit: 3 semester-hours

GEOGRAPHY 423. *The Geography of Transportation*

An intensive examination of the principles of transportation geography is provided. The different methods of transportation are studied systematically with regard to their development and present-day role in regional development. The growth of international specialization and the resulting economic development are also considered.

Credit: 3 semester-hours

GEOGRAPHY 424. *Geography of New Jersey*

This course is a detailed topical and regional study of New Jersey. Physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relations with neighboring states are intensively studied. On the basis of the data thus examined an attempt is made to delineate the geographic regions of the state. Emphasis is placed throughout on the relationship between New Jersey's people and New Jersey's earth.

Credit: 3 semester-hours

GEOGRAPHY 425. *Geography of Exploration and Settlement*

This course is designed to survey the great age of exploration and settlement (1500-1900) of lands overseas inaugurated by the Columbian voyages. Its major themes are: knowledge concerning the lands of the earth, the unfolding of the world map, the type settlements erected by Europeans in distant lands. Special attention is given to motives for exploration, methods of navigation and travel, routes explored, and the cultural features marking European settlement.

Credit: 3 semester-hours

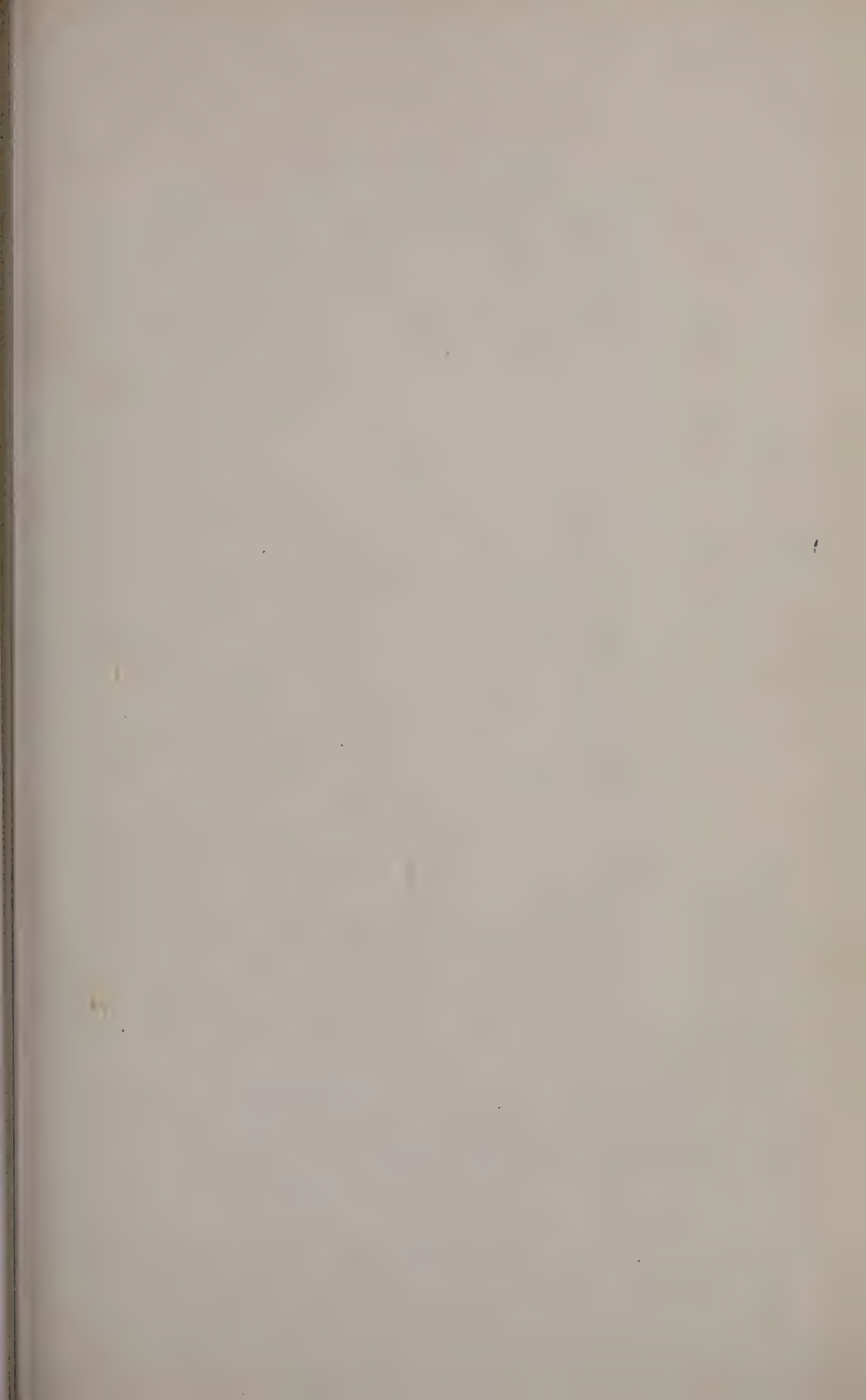
INDEX

Accreditation	22	Counseling and Advisement—Student	39
Administration—College	5	Course Requirements for B.A. Degree—	
Administrative Organization of the		Summary	46-47
College	31-32	Credits and Standards	47-50
Instruction Division	32	Credits	47
Personnel Division	32	Rating System	48
Business Division	32	Degree and Certificate	48
Admissions	26-30	Weighted Scores	48
I. Admission to the Freshman Class	26	Scholastic Honors	48
A. Applications	26	Requirements for Graduation and	
B. Entrance Examinations	26	Bachelor of Arts Degree	49
C. Academic Requirements for		Scholastic Standards	49
Admission	27	Grade Reports	49
D. Special Requirements for		Probation	49
Admission	28	Honors Program	50
1. Age certification	28	Curricula—College—Guiding	
2. Health report	28	Principles	44
3. Testimonials of character	28	Degree and Certificate	48
4. High school rating	28	Development Fund at Montclair	
5. Interview	28	State College	31
6. Speech test	29	Directory—Faculty	7-19
7. Requirements for special areas	29	Full-Time Faculty Members	7-18
E. Freshman Honors Section	29	Health Services	19
II. Admission as an Undergraduate		Library Staff	19
Transfer Student	29	Part-Time Faculty Members in	
III. Admission to the Graduate		Special Fields	18-19
Division	30	Dormitory Life	38
Alumni Association	31	Drama and Theater Productions	37
Andrews, Mark—Scholarship Fund	43	Education Department	55-66
Assembly Programs	37	General Statement	55
Athletics—College	38	Organization and Activities	55
Attendance and Absences	39	Student Teaching	57
Book Store	25	Supervision of Student Teaching	57
Bureau of Field Studies	33	Required Courses	57
Business Education Department	66-78	First-Year Courses	57
General Statement	66	Second-Year Courses	58
Business Education Major—Accounting		Third-Year Courses	58
Sequence	67	Fourth-Year Courses	59
Business Education Major—Secretarial		Education Electives	59
Studies Sequence	68	Other Courses in Education	61
Minors in the Business Education		Elementary Education Courses	65
Department	69	Employment Services—Part-Time	43
Secretarial Studies Minor Sequence	69	English Department	78-86
Social Business Studies Minor		General Statement	78
Sequence	69	English Major Sequence	79
Accounting Minor Sequence	69	English Minor Requirements	80
Freshman-Year Courses	70	First-Year Courses	80
Sophomore-Year Courses	71	General Education Courses	80
Elective Course of the Sophomore		English Major Courses	80
Year	72	Second-Year Courses	81
Junior-Year Courses	72	Third-Year Courses	82
Senior-Year Courses	74	Elective Courses of the Junior Year	82
Elective Courses—Business Education	75	Fourth-Year Courses	82
Calendar—College—1960-61 and		Elective Courses—English	83
1961-1962	2	Expenses	24-25
Chapin Memorial Fund	42	General Expenses for Regular College	
Citizenship—General	36	Year of Approximately 37 weeks	24
College Credits	47	Living Expenses for Regular Year	25
College High School	47	Refunds	25

Faculty-Student Cooperative Association	25	Professional Courses	112
Fields of Instruction	44-46	General Education	50
Professional-Cultural Background		General Information	21-35
(General Education)	45	Geography Department	220-228
Professional Subject Matter		General Statement	220
(Specialization)	45	General Education Course	221
Professional Education—Basic and		The Geography Minor Sequence	221
Specialized	46	The First Year	221
Field Studies Fund	43	The Second Year	222
Fine Arts Department	86-95	Electives	223
General Statement	86	The Third and Fourth Years	223
Fine Arts Major Sequence	87	Other Courses in Geography	225
Freshman Year Courses	88	Gifts	26
General Education Courses	88	Grade Reports	49
Fine Arts Major Courses	88	Graduate Division of College	33-34
Fine Arts Elective Courses for Home		Grounds and Buildings	24
Economics Majors	88	Health Services	40
Sophomore Year Courses	89	History of College	22-23
Junior Year Courses	89	Holz, Margaret B., Fund for Student	
Senior Year Courses	90	Exchange	43
Fine Arts Electives	90	Home Economics Department	113-122
Fine Arts Elective Courses in the		General Statement	113
Humanities	93	Home Economics Major Sequence	114
Food Service	25-26	Freshman Year Courses	115
Foreign Language Department	95-113	Related Science Courses	
General Statement	95	of the Freshman Year	116
Beginning Languages	97	Sophomore Year Courses	116
French	99	Related Science Courses	
French Major Sequence	99	of the Sophomore Year	117
First Year Courses	100	Elective Courses of the	
Second Year Courses	100	Sophomore Year	117
Third Year Courses	101	Junior Year Courses	117
Elective Courses of the		Elective Courses of the	
Third Year	101	Junior Year	119
Fourth Year Courses	102	Senior Year Courses	119
Elective Courses of the		Elective Courses of the	
Fourth Year	102	Senior Year	120
German Minor	103	Honor Societies, Fraternities, Sororities,	
Sophomore Year Courses	103	and Clubs	39
Junior Year Courses	104	Honors Program	50
Senior Year Courses	104	Howe, Clarence O. S., Memorial	
Latin		Organ Fund	43
Latin Major Sequence	104	Industrial Arts Department	122-127
First Year Courses	105	General Statement	122
Second Year Courses	106	Industrial Arts Major Sequence	122
Third Year Courses	106	Freshman Year Courses	123
Elective Courses of the		Sophomore Year Courses	124
Third Year	106	Junior Year Courses	124
Fourth Year Courses	107	Elective Courses of the Junior and	
Elective Courses of the		Senior Years	126
Fourth Year	107	Insurance—Student	40
Spanish	107	Laboratory School	47
Spanish Major Sequence	108	Library	32-33
First Year Courses	108	Location of College	23-24
Second Year Courses	108	Mathematics Department	128-137
Third Year Courses	108	General Statement	128
Elective Courses of the		Mathematics Major Sequence	129
Third Year	110	First-Year Courses	130
Fourth Year Courses	110	Mathematics Courses for	
Elective Courses of the		Science Majors	131
Fourth Year	111	Second-Year Courses	131
Language	111	Elective Courses of the	
Background Course	111	Second Year	132

Third-Year Courses	132	The Minor Programs	160
Elective Courses of the		Physical Education	160
Third Year	134	Health Education	160
Fourth-Year Courses	134	The Required Program	160
Elective Courses of the		Health Education Courses	161
Fourth Year	135	Physical Education Courses	162
Music and Art	37	Parking	41
Music Department	137-154	Part-Time and Extension Courses	34
General Statement	137	Philosophy of College	21-22
The Music Major	137	Placement Service	30-31
Music Major Sequence—Instrumental		Probation	49
Emphasis	138	Professional Background Courses	50-55
Music Major Sequence—Vocal		General Education	50
Emphasis	139	Group I—Social Studies	51
Applied Music	140	Group II—Humanities	51
Entrance Requirements in		Group III—Science and	
Primary Instruments	141	Mathematics	53
Entrance Requirements in Piano,		Group IV—Mental and Physical	
Secondary Instrument	141	Health	54
Student Teaching	142	Professional Subject Matter Courses	66-228
Entrance Requirements for Student		Fields of Specialization	66
Teaching	142	Publications—Student	38
For Junior Student Teaching	142	Purposes of College	21
For Senior Student Teaching	142	Radio Corporation of America	
Ensemble	143	Scholarships	42
Recitals	143	Rating System	48
Music for the General Student	143	Requirements for Graduation and	
Pipe Organ	143	Bachelor of Arts Degree	49
Instrument Rental	143	Russ, Edward, Scholarship Fund	42
First-Year Courses	143	Scholarships and Loans	41-43
General Education Course	144	Scholastic Honors	48
Music Major Courses	144	Scholastic Standards	49
Second-Year Courses	144	Science Department	167-186
Third-Year Courses	147	General Statement	167
Fourth-Year Courses	149	Science Major Sequence—	
Elective Courses of the		Specialization in Biology	168
Fourth Year	150	Science Major Sequence—	
National Defense Student Loan		Specialization in Physical Science	168
Program	42	Observation Requirements	169
New Jersey Bell Telephone Company		Minors in Science	169
Scholarships	42	First-Year Courses	170
New Jersey State School of		Science Courses for Home	
Conservation	33	Economics Majors	170
Offerings for Teachers-in-Service	34-35	Science Courses for Physical	
Part-Time and Extension Courses	34	Education Majors	171
Summer Session	35	Second-Year Courses	171
Orientation of New Students	36	Science Courses for Home	
Panzer School of Physical Education		Economics Majors	172
and Hygiene	154-167	Science Courses for Physical	
History	154	Education Majors	172
Objectives	155	Third-Year Courses	173
Admission Requirements	156	Science Elective Course for	
College Athletics and Men's		Home Economics Majors	174
Intramurals	156	Fourth-Year Courses	174
W.A.A.	156	Elective Courses in Science	175
Club and Team Requirements	156	Elective Courses in Biology	178
Camping Requirement	157	Elective Courses in Chemistry	181
Gymnasium Costumes	157	Elective Courses in Physics	183
The Major Program	157	Secretarial and Clerical Assistants	19-20
Physical Education Major Sequence—		Social Activities	39
Men	157	Social Studies Department	186-210
Physical Education Major Sequence—		General Statement	186
Women	159	Social Studies Major Sequence	187

Minors in the Field of the Social Studies	188	Recommended Sequence for Limited Specialization	212
First-Year Courses	188	The Speech Major—The First Two Years	212
Second-Year Courses	189	The Third Year	214
Third-Year Courses	189	The Four Year	215
Elective Course of the Third Year	190	Electives	217
Fourth-Year Courses	190	State Officials	5
Elective Courses of the Fourth Year	191	Assistant Commissioner for Higher Education	5
Ancient and Medieval History	191	Commissioner of Education	5
Modern European History	192	Director of Teacher Education and Certification	5
United States History	194	State Board of Education	5
The Americas	195	State Scholarships	41
Anthropology	196	Stone, John C., Scholarship	42
International Affairs	197	Student Exchange with French and Spanish Speaking Countries	38
Economics	198	Student Government Association	36
Sociology	199	Student Interests and Activities	36-39
Political Science	201	Student Personnel and Activities	36-43
Philosophy	201	Student Personnel Division	39
Field Studies in American Life	201	Student Personnel Services	39-41
Background Studies in American Life	205	Summer Session	35
Institutes and Workshops	205	Veterans Counseling	40
Speech Department	210-220	Weighted Scores	48
General Statement	210	Who's Who in American Universities and Colleges	39
The Speech Major Sequence	210	Work Scholarships	41
The Speech Minor Sequence	211		
Sequences of Courses in Speech Minor	212		



**MONTCLAIR
STATE
COLLEGE**

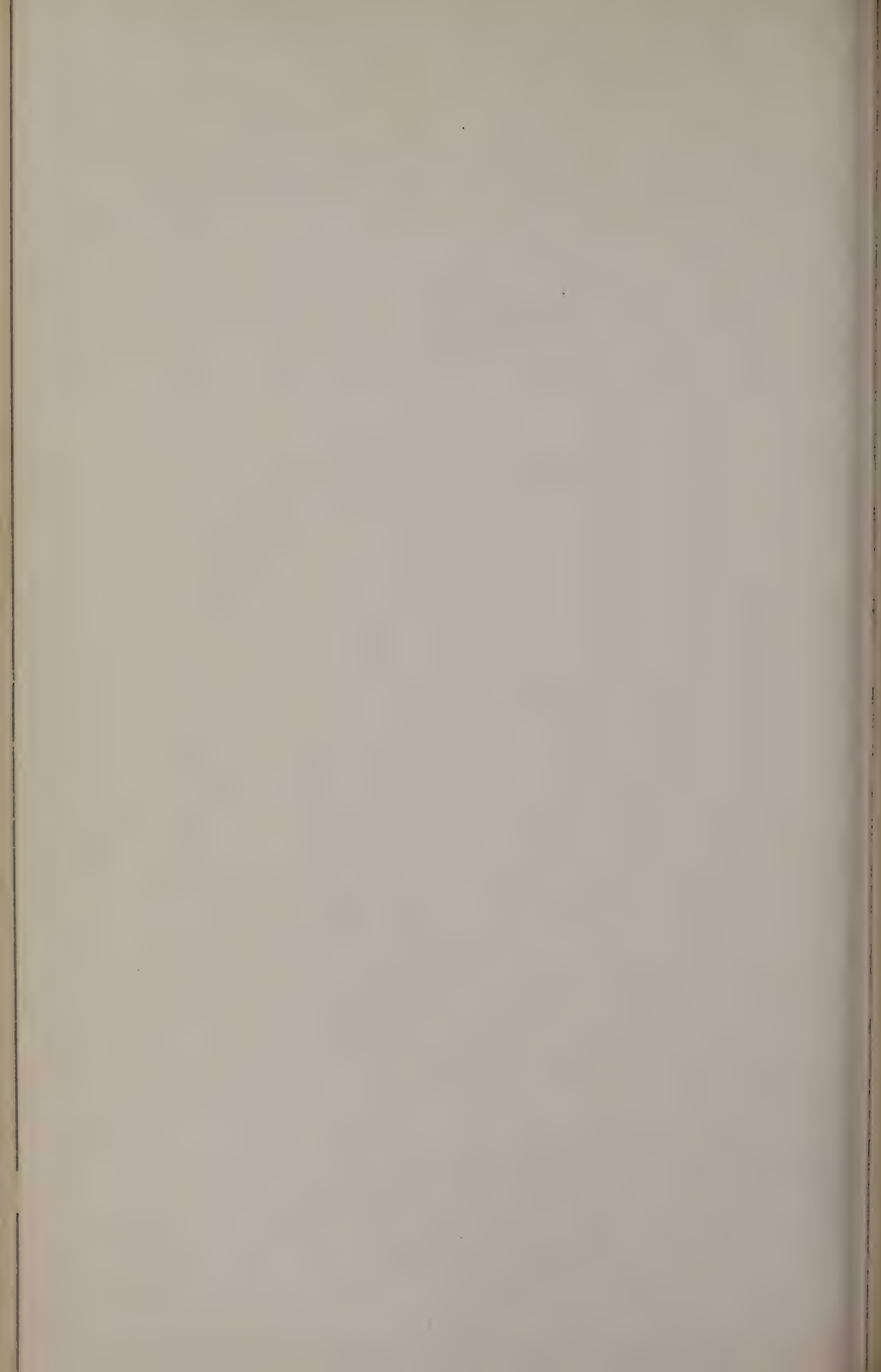


MONTCLAIR STATE COLLEGE

UNDERGRADUATE

BULLETIN

1962-1963



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Student Personnel Services, Scholarships, Dormitories	Mr. Lawton W. Blanton, Dean of Students
Admission to Undergraduate Division	Mr. George G. King, Director of Admissions
Business and Financial Matters	Mr. Bernard Siegel, Business Manager

LOCATION

The College campus may be reached by the Lackawanna Railroad to Montclair, and then by bus to the southeast entrance; by the Erie Railroad to the Montclair Heights Station, which is near the south entrance; and also by direct bus lines from New York (DeCamp 66), Newark (Public Service 60), the Oranges, (Public Service 76), and Paterson (Public Service 76). Major roads passing close to the campus are Routes 3 and 46 and the Garden State Parkway.

ADMINISTRATIVE ORGANIZATION

The College is organized for administrative purposes into three divisions: instructional administration, personnel administration and business administration. These divisions are under the direction of the President of the College and the Administrative Council in co-operation with the faculty.

Instructional Division

The Dean of the College has direct supervision over the instructional division of the College. The Dean is assisted by department chairmen, the Registrar, librarians, and committees in considering matters related to instruction. This division is concerned with curriculums, instructional facilities, teaching aids, assignment of staff and classrooms, and all matters related to the instructional program of the College.

Student Personnel Division

The Student Personnel Division has the responsibility of providing for the physical health, mental health, and social life of all students. The Dean of Students is the head of the personnel division. He is assisted in his responsibilities by assistant directors of personnel for men and women, the Director of Admissions, the Registrar, the College Physician, college nurses, dormitory directors, and faculty members who have specific assignments as advisers to student groups or individual students.

Business Division

The business division has charge of financial matters such as appropriations, receipts, expenditures, inventories, audits, and reports. This division also superintends buildings and grounds, and general operations.

Tuition and fees are paid at the Business Office.

GENERAL INFORMATION

LIBRARY

The present library is located on the main floor of College Hall and contains approximately 90,000 volumes.

The new library under construction will be the heart of the campus. It will include 200,000 volumes to serve a growing student body which will ultimately contain five thousand students and will serve a part-time student body of two thousand, and a minimum of two thousand undergraduate and graduate students in summer session.

It will house special collections of books as well as the regular volumes, and will include the China Institute Collection, the Lincoln Collection, the Webster Collection, and these will ultimately exceed five thousand volumes.

The library personnel have been working with the architect and representatives of the State Department of Education to provide for all the advanced functions of an up-to-date college library; reference rooms, curriculum laboratories, reference and bibliographic sections, classrooms, and even provisions for future expansion.

General Citizenship

To teach is a privilege and not a right of every individual. Montclair State College is organized for students who have an interest in promoting the welfare of society by teaching in the public schools. Opportunities are offered by the College for developing educational interest, physical health, emotional adjustment and social attitudes and habits. The students are expected to make definite contributions to the welfare of the College and are encouraged to demonstrate their leadership through cooperation and service during their life at Montclair. These can be important attributes for one who is preparing to be a teacher.

NEW JERSEY STATE SCHOOL OF CONSERVATION

Montclair State College with the five other state colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne, Stokes State Forest, Sussex County.

A requirement for all students is a stay at the camp to learn something of outdoor education.

Parking

Because of limited parking facilities, dormitory students and students living within two miles of the campus are not permitted to park their automobiles on campus or on the streets in the vicinity of the College. Freshman students will be required to park their cars in specially designated areas. Commuting students are encouraged to organize car pools and to use public transportation in order to conserve parking space.

Student Exchange with French and Spanish Speaking Countries

The College has a student exchange program in the field of modern foreign languages. Selected students, following their junior year, may be offered the opportunity to study abroad for a year in some foreign teachers college or university under Montclair auspices. Students go to France, Canada, Spain, Mexico, or South America. This program is administered through the Margaret B. Holz Fund for Student Exchange.

College Athletics

The College maintains an intercollegiate and intramural sports program for men and women. The principal sports for men include football, basketball, baseball, track and field, golf, tennis, soccer, wrestling, bowling, fencing, and gymnastics.

The women's athletic activities include volley ball, basketball, softball, tennis, golf, archery, fencing, bowling, field hockey, and gymnastics.

Varsity sports are administered by the Men's Athletic Commission which is composed of students and faculty members.

THE COLLEGE CURRICULA

The content, organization, and instructional procedures of the various curricula and courses are based on the guiding principles adopted by the State Board of Education. These principles are in accord with those which Montclair has followed in developing its curricula. They have directed and unified the work of the staff in its selection, organization, and treatment of curricular materials.

These guiding principles are:

- The definite objective of a professional college makes certain requirements necessary, yet insofar as practicable the special interests of individual students should be recognized.
- After the major and minor fields of specialization have been chosen, there should be comparatively little opportunity for free elections.
- Each curriculum should provide a basis of required background courses and professional activities.
- Each curriculum should provide for an understanding of the aims and organization of education in the appropriate levels and for guidance and skill in selecting, organizing, and presenting instructional materials.
- Each curriculum should make adequate provision for specialization.
- Subject matter should be treated professionally.
- The courses and activities in a given curriculum should be sequential and integrated.
- Courses should be broadly humanizing and should be related to what takes place in society and what is done in school.
- The demonstration school should be the laboratory and integrating center of all courses and all curricula.
- General educational theories and techniques should be exemplified in regular class instruction and frequently demonstrated in the laboratory school.
- The relative value of the elements of the professional instruction should be checked by the strengths and weaknesses of the college product.
- The curricula and courses of the College are the servants of a changing society, and therefore, should be subject to continual adjustment.

FIELDS OF INSTRUCTION

The general instructional division of the College has three functions. The first is to provide each student with a rich background. The second is to provide professional subject matter which includes sound standards of scholarship. The third is to provide theories and techniques and their application in teaching. Each of these departments of instruction is discussed briefly in the following paragraphs.

General Education

General Education is that phase of education which prepares the individual for purposeful and responsible citizenship in a free society as distinguished from that which prepares him for a profession or occupation. Courses in communication, the humanities, science, mathematics, social studies, health and physical education are included.

Every teacher who can recognize the many-sided interests of his students must have a broad philosophy of life and an interest in the life experiences of youth. Furthermore, every teacher who specializes in a field of knowledge must be familiar with the interests, activities, and problems of society as they relate to the specialization. Therefore, the College recognizes that each student

must be familiar with social, political, economic, industrial, scientific, religious, literary, and aesthetic phases of life, and that this background should be a body of related knowledge rather than a collection of isolated parts.

Such professional-cultural background courses comprise more than one-third of the total college requirements for graduation.

Specialization

Specialization is built upon the related and fundamental body of knowledge acquired in general education and provides a command of subject matter in the major field. Opportunities are provided so intellectual curiosity will be stimulated, which leads to individual scholarship.

The student is required to complete a minimum of thirty semester hours in his major field in addition to the educational requirements of all students. It has been college policy to treat subject matter professionally. This requires not only an academic knowledge of subject matter but also a teaching knowledge of that same subject matter.

Basic and Specialized Professional Education

The principles and needs of primary education are covered adequately under the Department of Education.

SUMMARY OF COURSE REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

I. Professional Background Courses (General Education)		
English 100C Fundamentals of Writing	3	
Speech 100D Fundamentals of Speech	3	
Social Studies 100A Development of World Civilization	3	
Social Studies 100B Development of World Civilization	3	
Social Studies 200A Contemporary American Life I	3	
Social Studies 200B Contemporary American Life II	3	
Science 100A Physical Science or		
Science 100B Biological Science	4	
Science 100C The Earth Sciences	2	
Mathematics 300 Social Uses of Mathematics	2	
Mathematics 400 Educational Statistics	2	
Elective in Mathematics or Science	2	
English 100G Western World Literature	3	
Fine Arts 100 Introduction to the Visual Arts	3	
Music 100 Music Appreciation	2	
Language 300 Foundations of Language	2	
Elective in the Field of Humanities	2	
Physical Ed. 100A, 100B, 200A, 200B Phys. Ed. Activities	2	
Education 100 Mental Hygiene and Personal Adjustment	2	
Health Education 100 Healthful Living	2	48
II. Professional Education (Basic)		
Education 201 Human Development and Behavior I	3	
Education 202 Human Development and Behavior, II	3	
Education 303 The Teacher in School and Community	3	
Education 401 Development of Educational Thought	3	
Elective in Professional Education	3	15
III. Specialization (Major subject including student teaching)		
See departmental requirements		53
IV. Electives		
.....		12
		<hr/> 128

HONORS PROGRAM

In the fall of 1960 an Honors Program was inaugurated. Freshmen qualifying for Honors are exempt from the elementary *Fundamentals of Writing* (English 100C) and *Western World Literature* (English 100G) courses, generally required, and instead read extensively and intensively great works of world literature in the course, English 100A and 100B, *World Literature: Its Forms and Its Masters*. The course, Social Studies 100A and 100B, *Development of World Civilization*, also entails work of quality and extent beyond that of regular freshmen. A weekly seminar of invited specialists supplements the seminars in World Literature and World Civilization. Otherwise, Honors freshmen pursue the regular courses of their respective majors.

Present plans call for additions to the freshmen offerings and for the program to ascend one class level each year until a comprehensive Honors Program is operating from the freshman through the senior year.

PROFESSIONAL BACKGROUND COURSES

GENERAL EDUCATION

The objectives and philosophy of the courses in general education have been discussed in the section headed "Fields of Instruction." The outline of curricular requirements shows that forty-eight semester-hours out of the total of 128 semester-hours required for graduation are included in the requirements for general education.

These courses are grouped in four principal areas as follows: Social Studies, Humanities including communications, Mathematics and Sciences, and Mental and Physical Health. The course descriptions indicate the contributions of each one to the development of the general cultural background deemed a necessary part of the preparation of every teacher regardless of level of teaching or of subject specialization to be taught. The order of inclusion of these courses in each curriculum is found in the outline of sequence of courses under each major department.

THE DEPARTMENT OF EDUCATION

Even though the principal function of the entire College is educational, there is a Department of Education which integrates the work of the entire College by coordinating all the professional aspects of training such as subject-matter, teaching techniques, observation, and student teaching. The Department carries out its responsibility through: the courses in education and psychology, the College High School, the student teaching program and other professional experiences, and the placement and professional adjustment services. The work of these agencies transcends all departmental lines; the special interests and functions of any one department contribute to the professional aims of the institution which are broader in scope and purpose than those of any of the subdivisions of the College.

Since the main purpose of the College is professional, departmental aims are identical or similar. Hence the aims of the Department of Education are not exclusively its own. Its chief and particular function, however, is to assist and to give leadership in the following ways:

- (1) It helps the prospective teacher to take an intelligent and active part in his own personal and professional orientation.
- (2) It arouses an awareness of the possibilities of the profession of teaching as an opportunity to invest one's interests and powers in promoting the social good.
- (3) It gives an understanding of both elementary-school and high-school students, their natures, interests, and needs.
- (4) It provides for a gradual induction into the profession of teaching by means of a carefully arranged sequence of education courses, by observation of and participation in school classwork.
- (5) It directs the student as he becomes an active and responsible teacher in the student-teaching program.
- (6) It provides an analysis of the student-teaching experiences.
- (7) It aids in coordinating the work of the college departments through its integrating functions.
- (8) It provides training which will aid the student in taking an active part in the extracurricular life of the school and in community life.
- (9) It gives a forward look into the profession so that it shall be regarded as a worthy, life-time vocation.

The Department not only promotes the professional aspect through its materials and organization, but supplements the work of professionalization of all the departments.

Organization and Activities

The required courses in education have been designed to give a survey of the essentials of the professional aspects of teaching. Five points of view are emphasized: the sociological, the biological, the psychological, the pedagogical or technical, and the philosophical. Although in a given semester course only one or two of these fields receive special emphasis, the content is not limited to them. There is rather the attempt throughout to conduct an integrated treatment of professional problems.

Special attention has been given to the sequence of the required courses and to the units within courses. In so far as it is administratively possible and expedient, courses in education parallel those in other departments. In this way the various departmental courses reinforce and supplement each other.

In the organization of all courses the needs of society and the needs and interests of the students are considered. Content material is taught, not as detached from the student's everyday world, but as part of his professional life in pre-service training. Both logical and psychological organizations are utilized, the former for completeness and unity, the latter for vitality.

The work in psychology includes some opportunity for firsthand observation of children and adolescents in their homes, on the playground and in other out-of-school settings, and in school. The aim is to acquaint the student, through various means, with the stages in normal development from infancy through adolescence. An effort is made to build an understanding of what is involved in the psycho-

logical development of the individual and a basic understanding of the needs of children and adolescents together with some insight into the resources through which these needs may be satisfied. Special emphasis is given to the particular problems encountered in school situations.

Observation and participation in College High School occupy a large place in the courses in education. It is through personal contact with pupils and with actual school conditions that an understanding of the meaning of educational theory is developed.

Principally for the purpose of orientation, freshmen are assigned to a limited number of observations in College High School. An organized experience in community social agencies is required as part of the pre-professional education of all students. This normally takes place during the freshman year.

Sophomores are assigned to the study of specific, individual College High School students.

Juniors are assigned by their major departments to specific demonstration teachers for a series of carefully planned observation and participation experiences. Also, all juniors spend one week, full-time, in a public school observing and participating in the teaching.

Seniors are assigned to the College High School demonstration classes taught by their special departmental methods course instructors. During the senior year the emphasis is on relating the activities of the demonstration class to the work done in the methods courses.

Immediately preceding the work in student teaching offered in the senior year, a course in the *Development of Educational Thought* is given. The major purpose of this course is to study with the student those basic and fundamental principles that should guide our secondary schools.

STUDENT TEACHING

Ten weeks of student teaching in the public schools of New Jersey are required of all students who complete the regular program of graduation requirements. For some departments this period is divided between the junior and senior years; for other departments all student teaching is reserved for the senior year.

The purpose of student teaching is to give the student an opportunity to relate theory to practice under skilled supervision; to offer a chance to evaluate his own strengths, weaknesses, and personal and professional needs; and to determine his readiness for responsible membership in the teaching profession.

Each student is assigned to an experienced teacher in a secondary school. In addition, students whose certification majors also include the elementary school are also assigned to a qualified elementary-school teacher for a comprehensive experience covering all grade levels. While student teaching, the student is required to assist, observe, and participate in all regularly scheduled school activities and to follow the daily and vacation schedules as determined by the local school. Wherever feasible assignment is made to schools within daily commuting distance of the student's home; however, students must accept assignment in any community designated by the College.

Following the student-teaching internship, the student returns to the campus for further study in professional and academic courses.

During student teaching, the student is frequently visited at work by supervisors from both the subject matter and Education departments. As an additional means of improving teaching ability, group and individual conferences are held on the campus during the period of internship.

REQUIREMENTS FOR ASSIGNMENT TO SENIOR STUDENT TEACHING

A student must meet the following requirements for student teaching in the senior year:

1. Approval by the department chairman based upon the following considerations:
 - a. A cumulative grade point average of 2.0 at the close of the semester immediately preceding student teaching
 - b. A cumulative grade point average of 2.0 in the major field of specialization
 - c. Satisfactory completion of the methods course in the major area
 - d. No grades of "Incomplete" or "F" in a major area
2. Approval by the Chairman of the Education Department
3. Approval by the College physician signifying that the student is in good health and free from any disease or physical defects which might interfere with success as a teacher.
4. A College record free from personal and social qualities considered undesirable for the teaching profession.

REQUIRED COURSES

Courses numbered EDUCATION 100, 201, 202, 303, 304, 401, 403, and a three-point education elective are required of all students; courses numbered otherwise are elective.

THE DEPARTMENT OF BUSINESS EDUCATION

Montclair State College is now the only state college in the northern section of New Jersey that trains business-education teachers. The Business Education Department prepares teachers who are qualified to teach all of the business-education subjects usually offered in most high schools.

Every business-education major is certified to teach typewriting and the general business-education subjects. In addition, every major selects one of the following two areas of specialization: (1) accounting, (2) secretarial studies.

Students majoring in other departments of the College can minor in: (1) secretarial studies, (2) social business studies, (3) accounting.

All of the work in the Business Education Department is open to students who have never studied business-education subjects in high school. Students who can type, write Gregg shorthand, or do accounting with a reasonable degree of speed and accuracy may be exempted from the first courses upon the successful completion of placement examinations given during the first week of classes.

BUSINESS EDUCATION MAJOR

Specialization in Accounting FRESHMAN YEAR

Fall Semester		Spring Semester	
	S.H.		S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 100A <i>Dev. of World</i>		Soc. St. 100B <i>Dev. of World</i>	
<i>Civilization</i>	3	<i>Civilization</i>	3
Speech 100D <i>Fundamentals of</i>		Eng. 100C <i>Fundamentals of</i>	
<i>Speech</i>	3	<i>Writing</i>	3
Sci. 100C <i>The Earth Sciences</i>	2	Sci. 100A <i>Phys. Science or</i>	4
Ed. 100 <i>Mental Hygiene & Pers.</i>		Sci. 100B <i>Biological Science</i>	
<i>Adj.</i>	2	Mus. 100 <i>Music Appreciation</i>	2
F.A. 100 <i>Intro. to the Visual</i>		Math. 300 <i>Social Uses of</i>	
<i>Arts</i>	3	<i>Mathematics</i>	2
B.E. 101 INTRODUCTION TO BUSI-		B.E. 104 TYPEWRITING, II	2
NESS	3		
B.E. 103 TYPEWRITING, I	0		
	16½		16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 200A <i>Contemporary</i>		Soc. St. 200B <i>Contemporary</i>	
<i>American Life</i>	3	<i>American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior</i>	3	Ed. 202 <i>Human Dev. & Behavior</i>	3
Eng. 100G <i>Western World</i>		H.Ed. 100 <i>Healthful Living</i>	2
<i>Literature</i>	3	Elective	2-3
Elective	2-3	B.E. 202 ACCOUNTING, II	3
B.E. 201 ACCOUNTING, I	3	B.E. 408 BUSINESS FINANCE	3
B.E. 203 TYPEWRITING, III	1½	Observations	0
Observations	0		
	16-17		16½-17½

JUNIOR YEAR

Ed. 303 <i>Teacher in School &</i>		Ed. 304 <i>Prins. & Techs. of Sec.</i>	
<i>Community</i>	3	<i>Ed.</i>	3
Lang. 300 <i>Foundations of</i>		Math. 400 <i>Statistics</i>	2
<i>Language</i>	2	Electives	2-5
Elective	2-3	B.E. 306 BUSINESS LAW, II	3
B.E. 305 BUSINESS LAW, I	3	B.E. 204 TYPEWRITING, IV	
B.E. 301 ACCOUNTING, III	3	<i>(Methods)</i>	1½
B.E. 308 ECONOMIC GEOGRAPHY	3	B.E. 409 CONSUMER EDUCATION	3
Observations	0	Observations	0
	16-17		14½-17½

Supervised Work Experience—Summer—0

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective in <i>Math. or Science</i>	2	Ed. 4— <i>Education Elective</i>	3
Elective	2	Elective in <i>Humanities</i>	2
B.E. 401A MATERIALS &		Elective	2
METHODS OF Tchg. GENERAL			
BUSINESS	3		15
B.E. 405 OFFICE PRACTICE —			
CLERICAL	3		
B.E. 302 ACCOUNTING, IV			
<i>(Methods)</i>	4		
Observations	0		
	17		

Total semester-hours—128

BUSINESS EDUCATION MAJOR

Specialization in Secretarial Studies

FRESHMAN YEAR

<i>Fall Semester</i>		S.H.	<i>Spring Semester</i>		S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>			Phys. Ed. 100B <i>Phys. Ed.</i>		
<i>Activities</i>	1/2		<i>Activities</i>	1/2	
Soc. St. 100A <i>Dev. of World Civilization</i>	3		Soc. St. 100B <i>Dev. of World Civilization</i>	3	
Speech 100D <i>Fundamentals of Speech</i>	3		Eng. 100C <i>Fundamentals of Writing</i>	3	
Sci. 100C <i>The Earth Sciences</i> ..	2		Sci. 100A <i>Physical Science or</i> ..	4	
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2		Sci. 100B <i>Biological Science</i> ..		
F.A. 100 <i>Intro. to the Visual Arts</i>	3		Mus. 100 <i>Music Appreciation</i> ..	2	
B.E. 101 <i>INTRODUCTION TO BUSINESS</i>	3		Math. 300 <i>Social Uses of Mathematics</i>	2	
B.E. 103 <i>TYPEWRITING, I</i>	0		B.E. 104 <i>TYPEWRITING, II</i>	2	
	16 1/2			16 1/2	

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>			Phys. Ed. 200B <i>Phys. Ed.</i>		
<i>Activities</i>	1/2		<i>Activities</i>	1/2	
Soc. St. 200A <i>Contemporary American Life</i>	3		Soc. St. 200B <i>Contemporary American Life</i>	3	
Ed. 201 <i>Human Dev. & Behavior, I</i>	3		Ed. 202 <i>Human Dev. & Behavior, II</i>	3	
Elective	2		Elective	2-3	
B.E. 201 <i>ACCOUNTING, I</i>	3		Eng. 100G <i>Western World Literature</i>	3	
B.E. 203 <i>TYPEWRITING, III</i>	1 1/2		H. Ed. 100 <i>Healthful Living</i> ..	2	
B.E. 205 <i>STENOGRAPHY, I</i>	4		B.E. 206 <i>STENOGRAPHY, II</i>	3	
Observations	0		Observations	0	
	17			16 1/2 or 17 1/2	

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3		Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3	
Lang. 300 <i>Foundations of Language</i>	2		Math. 400 <i>Statistics</i>	2	
Elective	2-3		Electives	2-5	
B.E. 305 <i>BUSINESS LAW, I</i>	3		B.E. 204 <i>TYPEWRITING, IV (Methods)</i>	1 1/2	
B.E. 303 <i>STENOGRAPHY & TRANSCRIPTION, I</i>	3		B.E. 409 <i>CONSUMER EDUCATION</i> ..	3	
B.E. 308 <i>ECONOMIC GEOGRAPHY</i> ..	3		B.E. 407 <i>OFFICE PRACTICE—SECRETARIAL</i>	3	
Observations	0		Observations	0	
	16-17			14 1/2-17 1/2	

Supervised Work Experience—Summer—0

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ..	3		Ed. 403 <i>Student Teaching</i>	8	
Elective in <i>Mathematics or Science</i> ..	2		Ed. 4— <i>Education Elective</i>	3	
Elective	2-3		Elective in <i>Humanities</i>	2	
B.E. 401A <i>MATERIALS & METHODS OF TCHG. GENERAL BUSINESS</i> ..	3		Elective	2-4	
B.E. 304 <i>STENOGRAPHY & TRANSCRIPTION II (Methods)</i>	3			15-17	
B.E. 405 <i>OFFICE PRACTICE—CLERICAL</i>	3				
Observations	0				
	16-17				

Total semester-hours—128

THE DEPARTMENT OF ENGLISH

The English Department serves the entire college by offering certain courses in composition and literature which are required of all students. It offers other courses which may be taken as electives by students who are preparing to teach in any field, and a four-year program for those students who choose the subjects as a major or minor field of specialization.

The four-year program offers a rich background of knowledge and literary experience to the student who wishes to teach English in the high school. Courses in speech and composition develop the student's ability to express himself orally and in writing. Other courses are designed to give the student understanding of the way human beings use language to express and communicate their ideas and experiences, of the types and forms of literature, of the major developments in the literary history of the Western world, of the many masterpieces of British and American literature, of the subtle and intimate relationship between literature and human culture, and of the ways by which expression and reading may develop and enrich the lives of high school students.

Training for leadership in extra-curricular programs of the secondary school is provided in the activities of organizations sponsored by the Department. The ENGLISH CLUB welcomes to membership English majors and minors regardless of special interests and abilities and serves as an integrating factor for students in the Department. ALDORNIA, the honor society of the Department, limits its membership to those English majors who excel in scholarship. The CREATIVE WRITING CLUB offers writing and criticism experiences to students interested in composition as creative art.

Three publications of the Student Government Association, THE MONTCLARION (the College Newspaper), THE MONTCLAIR QUARTERLY (a literary magazine), and LA CAMPANA (the college annual), are sponsored by the Department of English.

ENGLISH MAJOR FRESHMAN YEAR

<i>Fall Semester</i>		<i>S.H.</i>	<i>Spring Semester</i>		<i>S.H.</i>
Phys. Ed. 100A	Phys. Ed.		Phys. Ed. 100B	Phys. Ed.	
<i>Activities</i>		$\frac{1}{2}$	<i>Activities</i>		$\frac{1}{2}$
Soc. St. 100A	Dev. of World Civ.	3	Soc. St. 100B	Dev. of World Civ.	3
F.A. 100	Intro. to the Visual Arts	3	Mus. 100	Music Appreciation	2
Ed. 100	Mental Hygiene & Pers.		Sci. 100A	Physical Science or	4
<i>Adj.</i>		2	Sci. 100B	Biological Science	
Sci. 100C	The Earth Sciences	2	Eng. 100B	World Literature, II	3
Eng. 100A	World Literature, I	3	Eng. 102	DRAMA FROM THE	
Eng. 103	ENGLISH COMPOSITION	3	MIRACLE PLAYS TO O'NEILL		3
		$16\frac{1}{2}$			$15\frac{1}{2}$

SOPHOMORE YEAR

Phys. Ed. 200A	Phys. Ed.		Phys. Ed. 200B	Phys. Ed.	
<i>Activities</i>		$\frac{1}{2}$	<i>Activities</i>		$\frac{1}{2}$
Soc. St. 200A	Contemporary		Soc. St. 200B	Contemporary	
<i>American Life</i>		3	<i>American Life</i>		3
Ed. 201	Human Dev. & Behavior, I	3	Ed. 202	Human Dev. & Behavior, II	3
Speech 100D	Fundamentals of		Electives		4
<i>Speech</i>		3	Eng. 203	THE LANGUAGE ARTS	2
Electives		4	Eng. 202	AMERICAN	
Eng. 201	AMERICAN		LITERATURE, II		3
<i>LITERATURE, I</i>		3			$15\frac{1}{2}$
		$16\frac{1}{2}$			

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Math. 400 <i>Statistics</i>	2
H.Ed. 100 <i>Healthful Living</i>	2	Lang. 300 <i>Foundations of Language</i>	2
Electives	3	Electives	4
Eng. 301B SHAKESPEARE'S MAJOR PLAYS	3	Eng. 301A LITERATURE FOR ADOLESCENTS	2
Eng. 303 POETRY FROM CHAUCER TO FROST	3	Eng. 304 BRITISH & AMERICAN FICTION	3
	<hr/>		<hr/>
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Mathematics or Science</i>	2	Ed. 4— <i>Education Elective</i>	3
Electives	4	Elective— <i>Humanities</i>	2
Eng. 401 TEACHING OF ENGLISH IN SECONDARY SCHOOLS	3	Elective	2
Eng. 402 SURVEY OF BRITISH LITERATURE TO 1798	3		<hr/>
Eng. 419 GRAMMAR FOR TEACHERS	2		15
	<hr/>		
	17	Total semester-hours—128	

Note: 9 semester-hours of electives are required in a secondary teaching field other than the major.

Sixty observations divided between the junior and senior divisions of the College High School are required of senior English majors. These observations constitute partial fulfillment of the requirements of ENG. 401.

In addition to courses listed in this bulletin, there are courses at the graduate level which are offered in the Part-Time, Extension, and Summer Sessions. These courses are open to undergraduates who have completed student teaching. These courses are described in detail in the Graduate Bulletin.

THE ENGLISH MINOR

Requirements for the English minor are as follows:

	Semester-hours
ENGLISH 100G— <i>Western World Literature</i>	3
ENGLISH 201. <i>American Literature, I</i>	3
ENGLISH 202. <i>American Literature, II</i>	3
ENGLISH 303. <i>Poetry from Chaucer to Frost</i>	3
ENGLISH 304. <i>British and American Fiction</i>	3
ENGLISH 401. <i>The Teaching of English in Secondary Schools</i>	3
ENGLISH ELECTIVE	3
	<hr/>
	21

THE DEPARTMENT OF FINE ARTS

Students who complete the fine arts curriculum are certified to teach in the elementary schools, junior high schools, and senior high schools of New Jersey.

During the first two years the students explore design in a variety of media and the art forms of painting, ceramics, theater, and puppetry.

In the third year the students study art and civilization, textiles, the foundation of art education, and the arts of commerce and industry.

The work of the fourth year includes the making of prints and a study of the art curriculum of the elementary and secondary schools.

Sculpture, philosophy of art, metalwork, home design and community planning, drafting and woodwork, costume design, and life drawing are offered as electives. Drawing is required throughout the four years.

FINE ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>		<i>S.H.</i>	<i>Spring Semester</i>		<i>S.H.</i>
Phys. Ed. 100A	Phys. Ed.		Phys. Ed. 100B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 100A	Dev. of World Civilization, I	3	Soc. St. 100B	Dev. of World Civilization, II	3
Speech 100D	Fund. of Speech	3	Eng. 100C	Fund. of Writing	3
Sci. 100A	Physical Science or	4	Mus. 100	Music Appreciation	2
Science 100B	Biological Science		Ed. 100	Mental Hygiene & Pers. Adj.	2
F.A. 101A	DESIGN IN MATERIALS, I	3	F.A. 101B	DESIGN IN MATERIALS, II	3
F.A. 102A	CERAMICS: POTTERY & SCULPTURE, I	3	F.A. 102B	CERAMICS: POTTERY & SCULPTURE, II	3
F.A. 405A	DRAWING, I	0	F.A. 405B	DRAWING, II	0
		16½			16½

SOPHOMORE YEAR

Phys. Ed. 200A	Phys. Ed.		Phys. Ed. 200B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 200A	Contemporary American Life, I	3	Soc. St. 200B	Contemporary American Life, II	3
Ed. 201	Human Development & Behavior, I	3	Ed. 202	Human Development & Behavior, II	3
Sci. 100C	The Earth Sciences	2	H.Ed. 100	Healthful Living	2
Elective		2	Lang. 300	Foundations of Language	2
F.A. 200A	THEATER ARTS, I	2	Elective		2
F.A. 202A	PAINTING, I	3	F.A. 200B	THEATER ARTS, II	2
F.A. 405C	DRAWING, III	0	F.A. 202B	PAINTING, II	3
		15½	F.A. 405D	DRAWING, IV	0

17½

JUNIOR YEAR

Ed. 303 <i>The Teacher in School & Community</i>	3	Ed. 304X <i>Principles & Methods of Tchg.</i>	3
Electives	4	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus)	3
F.A. 201A TEXTILES, I	2	F.A. 201B TEXTILES, II	2
F.A. 300A ART & CIVILIZATION, I	3	Math. 300 <i>Social Uses of Mathematics</i>	2
F.A. 301A ART IN COMMERCE & INDUSTRY, I	2	F.A. 300B ART & CIVILIZATION, II	3
F.A. 302 FOUNDATIONS OF ART EDUCATION	2	F.A. 301B ART IN COMMERCE AND INDUSTRY, II	2
F.A. 405E DRAWING, V	0	F.A. 405F DRAWING, VI	0
	16		15

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 4— <i>Education Elective</i>	3
Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5	Elective— <i>Mathematics or Science</i>	2
Eng. 100G <i>Western World Lit.</i>	3	Elective— <i>Humanities</i>	2
Math. 400 <i>Educational Statistics</i>	2	Electives	4
F.A. 403A PRINT MAKING, I	2	F.A. 403B PRINT MAKING, II	2
F.A. 405G DRAWING, VII	1	F.A. 401 ART CURRICULUM OF ELEMENTARY & SECONDARY SCHOOLS	2
	16		15

Total semester-hours—128

THE DEPARTMENT OF FOREIGN LANGUAGES

The Foreign Language Department aims to train teachers for the junior and senior high schools in sound scholarship, true culture, and sympathetic understanding of the foreign people whose language they are to teach. The Department is also offering courses preparing students for the teaching of foreign languages in the elementary school.

All the courses in the Department of Foreign Languages are planned to provide linguistic skill, literary appreciation, and understanding of human relationships in order to insure efficient professional service. The emphasis is on sequential development which has the effect of unifying the work within the Foreign Language Department and of correlating it with English, social studies, education, art, and music.

Students majoring in a foreign language are required to take work in that language for the four years of the college course. In these four years the prospective teacher of French, Spanish, or Latin acquires a fundamental knowledge of his major subject and an understanding of world problems.

For majors in a chosen language the following courses are required: 101, 102, 201, 202, 301, 302, 401, 402, and 404.

For minors in a foreign language the following courses are required: 101, 102, 201, 202, 401, and 402. Students who begin a modern language in college may obtain credit for the beginning courses in a language provided they are admitted to 101 and 102 in their second year of the language.

Prerequisite for those majoring or minoring in any foreign language are three or four years of high school work in the language. Consideration will be given to excellent students who have not fully met this requirement. High school Latin is desirable for all language work, but it is not prerequisite for the study of a modern language at the College. The class work in French, German, Russian, and Spanish is conducted entirely in these languages.

The Foreign Language Department sponsors three language clubs. In these extracurricular activities prospective language teachers have ample opportunity for leadership, creative work, and worthy employment of leisure time.

The College High School plays an important part in the daily life of students of the Foreign Language Department. Observations and active participation through limited assistantship and occasional demonstration are made during the junior and senior years. Thus, the subject-matter of high school and college language classes is thoroughly integrated.

An attractive feature of the foreign language work preparatory to high-school teaching is the possibility of a year of study in a foreign country, a feature which this College stresses in its training of teachers of modern languages.

Students desiring academic credit for STUDY ABROAD register for the work before taking it. All such matters as the country and institution in which the work is to be done, the amount of credit to be received, reports to be made, and the like, are prearranged with the chairman of the department. For further information about this work, see page 35.

In the last thirty years, one hundred and ninety-one students from the College have spent a year of study in colleges and universities of Austria, France, Germany, Canada, Mexico, Spain, Switzerland, and South America.

BEGINNING LANGUAGES

FR. 100A AND 100B. *Beginning French*

Cr: 3 s.hrs. each

These courses are designed for students who desire to start French in college. Special emphasis is placed on training the student to understand, speak, read and write the foreign language. The foreign tongue is used almost exclusively in teaching the courses. Materials used introduce the student to French life and civilization. Laboratory work is included as part of the requirements for the courses.

FR. 200A AND 200B. *Intermediate French*

Cr: 3 s.hrs. each

These courses which form a continuation of FRENCH 100A and 100B are also open to students who wish to minor in French but who

lack the language proficiency necessary for FRENCH 101 and 102, courses designed for majors and selected minors. FRENCH 200A and 200B are conducted entirely in French. They provide a good knowledge of applied French grammar, the opportunity to develop the ability to read fluently with a good pronunciation and intonation, and practice in writing simple French compositions. They introduce the students to French literature from the medieval period to today. Laboratory work is included as part of the requirement for the courses.

GER. 100A AND 100B. *Beginning German* Cr: 3 s.hrs. each

These courses are designed for students without previous instruction in German. The approach is oral-aural, and students are taught to understand and to use simple idiomatic German. Since these courses are designed primarily for students needing the language as a tool, emphasis is placed on the ability to read German with a concomitant mastery of the principles of German word formation and of typically involved sentence structure. Classes are conducted in German. Laboratory work is included as part of the requirements for the courses.

GER. 200A AND 200B. *Intermediate German* Cr: 3 s.hrs. each

These courses are a continuation of GERMAN 100A and 100B, and are open to those who have successfully completed GERMAN 100A and 100B or the equivalent. In GERMAN 200A and 200B the reading material becomes increasingly more difficult with assignments being made in accordance with student needs and interest. GERMAN 200A and 200B should prepare students who wish to pursue graduate work to read scholarly literature in their respective fields. Laboratory work is part of the requirements for the courses.

RUSS. 100A AND 100B. *Beginning Russian* Cr: 3 s.hrs. each

Designed for those with no previous knowledge of Russian, these courses stress a thorough exposition of oral and written Russian. The reading of selected texts and conversation practice are included. Laboratory work is included as part of the requirements for the courses. These courses meet for three class hours and two laboratory hours weekly, for two semesters.

RUSS. 200A AND 200B. *Intermediate Russian* Cr: 3 s.hrs. each

These courses form a continuation of RUSSIAN 100A and 100B, and are open to those who have successfully completed RUSSIAN 100A and 100B or the equivalent. After a detailed grammatical review the main emphasis falls on translations from Russian literary classics of the nineteenth and twentieth centuries and on conversational practice. These courses meet for three class hours and two laboratory hours weekly for two semesters.

RUSS. 300A AND 300B. *Advanced Russian* Cr: 3 s.hrs. each

This course is a continuation of RUSSIAN 200A and 200B, and is open to those who have successfully completed RUSSIAN 200A and 200B or the equivalent. The course work in RUSSIAN 300A and 300B consists of extensive outside reading and translation of Russian literary classics from Pushkin to Sholokhov. Periodical literature

of a type appropriate to special interests of individual students may also be used. Prepared classroom speeches and discussion of these materials are conducted in Russian. There is particular stress on conversational Russian. This course meets for three class hours and two laboratory hours weekly for two semesters.

SPAN. 100A AND 100B. *Beginning Spanish* Cr: 3 s.hrs. each

These courses are designed for students who desire to start Spanish in college. Special emphasis is placed on the training of the student to understand, speak, read, and write the foreign language. Spanish is used almost exclusively in the teaching of the courses. Students are introduced to Spanish life and civilization through the materials used in the course. Laboratory work is included as part of the requirements for the courses.

SPAN. 200A AND 200B. *Intermediate Spanish* Cr: 3 s.hrs. each

These courses which form a continuation of SPANISH 100A and 100B are also open to students who wish to minor in Spanish but who lack the language proficiency necessary for SPANISH 101 and 102, courses designed for majors and selected minors. SPANISH 200A and 200B provide a thorough review of language skills and constant practice in using the written and spoken language. Reading and discussion of representative authors in various periods and literary schools of the Spanish-speaking countries are provided. Laboratory work is included as part of the requirements for the courses.

FRENCH

The following courses are arranged to give the prospective high school teacher of French an understanding of the French people, their culture, and their problems through a study of the development of their civilization—their social, economic, political, literary, and artistic life. All courses are given entirely in French, and are designed to give ever-increasing opportunities to develop self-expression in the foreign tongue through readings, discussions, and reports.

FRENCH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>		S.H.	<i>Spring Semester</i>		S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>			Phys. Ed. 100B <i>Phys. Ed.</i>		
<i>Activities</i>	½		<i>Activities</i>	½	
Soc. St. 100A <i>Development of</i>			Soc. St. 100B <i>Development of</i>		
<i>World Civilization</i>	3		<i>World Civilization</i>	3	
Eng. 100C <i>Fundamentals of</i>			Speech 100D <i>Fundamentals of</i>		
<i>Writing</i>	3		<i>Speech</i>	3	
Sci. 100A <i>Physical Science or</i>	4		F.A. 100 <i>Intro. to the Visual Arts</i>	3	
Sci. 100B <i>Biological Science</i> ..			Sci. 100C <i>The Earth Sciences</i> ..	2	
Ed. 100 <i>Mental Hygiene &</i>			FR. 102 <i>FRENCH CIVILIZATION:</i>		
<i>Personal Adjustment</i>	2		<i>ORIGINS TO 1610</i>	4	
FR. 101 <i>FRENCH CIVILIZATION:</i>					
<i>CONTEMPORARY FRANCE</i>	4				15½
		16½			

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	1/2	<i>Activities</i>	1/2
Soc. St. 200A <i>Contemporary</i>		Soc. St. 200B <i>Contemporary</i>	
<i>American Life</i>	3	<i>American Life</i>	3
Ed. 201 <i>Human Dev. &</i>		Ed. 202 <i>Human Dev. &</i>	
<i>Behavior, I</i>	3	<i>Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i> ...	2	H. Ed. 100 <i>Healthful Living</i> ...	2
Electives	4	Electives	4
FR. 201 SEVENTEENTH CENTURY		FR. 202 CORNEILLE, MOLIÈRE,	
FRENCH PROSE & POETRY	4	RACINE	4
	16 1/2		16 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School &</i>		Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
<i>Community</i>	3	Eng. 100G <i>Western World</i>	
Math. 300 <i>Social Uses of</i>		<i>Literature</i>	3
<i>Mathematics</i>	2	Math. 400 <i>Statistics</i>	2
Lang. 300 <i>Foundations of</i>		Electives	4
<i>Language</i>	2	FR. 302 DEVELOPMENT OF THE	
Electives	5	FRENCH NOVEL TO 1890	4
FR. 301 FRENCH CIVILIZATION:			16
EIGHTEENTH CENTURY	4		
	16		

SENIOR YEAR

Ed. 401 <i>Development of Educa-</i>		Ed. 403 <i>Student Teaching</i>	8
<i>tional Thought</i>	3	Ed. 4— <i>Education Elective</i>	3
Elective— <i>Mathematics or Science</i>	2	Elective— <i>Humanities</i>	2
Electives	4	FR. 404 SURVEY OF FRENCH	
FR. 401 TEACHING OF FRENCH IN		POETRY	2
SECONDARY SCHOOLS	3		15
FR. 402 FRENCH GRAMMAR FOR			
TEACHERS	4		
	16		

Total semester-hours—128

Note: 9 semester-hours of electives are required in a secondary teaching field other than the major.

THE GERMAN MINOR

SOPHOMORE YEAR

GER. 101. <i>German Civilization: Contemporary Germany</i>	Cr: 4 s.hrs.
GER. 102. <i>German Civilization: Selected Chapters of Its History</i>	
	Cr: 4 s.hrs.

JUNIOR YEAR

GER. 201. <i>German Literature: Prose and Poetry of the Nineteenth and Twentieth Centuries</i>	Cr: 4 s.hrs.
GER. 202. <i>German Literature: Prose and Poetry of the Late Eighteenth and Early Nineteenth Centuries</i>	Cr: 4 s.hrs.

SENIOR YEAR

GER. 402. <i>German Grammar for Teachers</i>	Cr: 4 s.hrs.
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LATIN

The courses in Latin are designed to continue the work begun in the language in high school. Further development of the ability to read and to comprehend the language and literature, and a deepening of the understanding and appreciation of the historical-cultural prominence of Rome and her contribution to Western civilization are basic objectives. Emphasis is placed upon the evolution of the language as it developed from the Greek to the Romance, upon the language of ideas as they are expressed in the literary masters, and upon the social, political, and economic institutions which have influenced the Western world.

LATIN MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>		<i>S.H.</i>	<i>Spring Semester</i>		<i>S.H.</i>
Phys. Ed. 100A	Phys. Ed.		Phys. Ed. 100B	Phys. Ed.	
<i>Activities</i>		½	<i>Activities</i>		½
Soc. St. 100A	Development of		Soc. St. 100B	Development of	
<i>World Civilization</i>		3	<i>World Civilization</i>		3
Eng. 100C	Fundamentals of		Speech 100D	Fundamentals of	
<i>Writing</i>		3	<i>Speech</i>		3
Sci. 100A	Physical Science or	4	F.A. 100	Intro. to the Visual Arts	3
Sci. 100B	Biological Science		Sci. 100C	The Earth Sciences	2
Ed. 100	Mental Hygiene & Per-	2	LAT. 102	POETS OF THE GOLDEN	
<i>sonal Adjustment</i>			<i>AGE</i>		4
LAT. 101	CICERO & ROMAN				
<i>PHILOSOPHY</i>		4			15½
		15½			

SOPHOMORE YEAR

Phys. Ed. 200A	Phys. Ed.		Phys. Ed. 200B	Phys. Ed.	
<i>Activities</i>		½	<i>Activities</i>		½
Soc. St. 200A	Contemporary		Soc. St. 200B	Contemporary	
<i>American Life</i>		3	<i>American Life</i>		3
Ed. 201	Human Dev. &		Ed. 202	Human Dev. &	
<i>Behavior, I</i>		3	<i>Behavior, II</i>		3
Mus. 100	Music Appreciation	2	H. Ed. 100	Healthful Living	2
Electives		4	Electives		4
LAT. 201	ROMAN LETTER		LAT. 202	ROMAN HISTORY	4
<i>WRITING AND BIOGRAPHY</i>		4			16½
		16½			

JUNIOR YEAR

Ed. 303	Teacher in School &		Ed. 304	Prins. & Techs. of Sec. Ed.	3
<i>Community</i>		3	Eng. 100B	Western World	
Math. 300	Social Uses of		<i>Literature</i>		3
<i>Mathematics</i>		2	Math. 400	Statistics	2
Lang. 300	Foundations of		Electives		4
<i>Language</i>		2	LAT. 302	ROMAN SATIRE	4
Electives		5			16
LAT. 301	ROMAN DRAMA	4			
		16			

SENIOR YEAR

Ed. 401	Dev. of Ed. Thought	3	Ed. 403	Student Teaching	8
Elective—Mathematics or Science		2	Ed. 4.	Education Elective	3
Electives		4	Elective—Humanities		2
LAT. 401	TEACHING OF LATIN IN		LAT. 404	MEDIEVAL LATIN	2
<i>SECONDARY SCHOOLS</i>		3			
LAT. 402	LATIN GRAMMAR FOR				15
<i>TEACHERS</i>		4			
		16			

Total: 128 semester-hours

SPANISH

Following the trend of the times, the work in Spanish while maintaining the classic approach is now placing considerable emphasis on Hispanic-American civilization. To a great extent our national policy of Western hemisphere comity and the immediate economic importance of Central and South America underlie the present keen interest of high-school students in the study of Spanish. The courses are given in Spanish to give the prospective teacher of Spanish opportunities for self-development through readings, discussions, and reports.

FRESHMAN YEAR

Fall Semester		S.H.	Spring Semester		S.H.
Phys. Ed. 100A	Phys. Ed.		Phys. Ed. 100B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 100A	Development of World Civilization	3	Soc. St. 100B	Development of World Civilization	3
Eng. 100C	Fundamentals of Writing	3	Speech 100D	Fundamentals of Speech	3
Sci. 100A	Physical Science or Sci. 100B Biological Science	4	F.A. 100	Intro. to the Visual Arts	3
Ed. 100	Mental Hygiene & Personal Adjustment	2	Sci. 100C	The Earth Sciences	2
SPAN. 101	CIVILIZATION OF SPAIN, I	4	SPAN. 102	CIVILIZATION OF SPAIN, II	4
		16½			15½

SOPHOMORE YEAR

Phys. Ed. 200A	Phys. Ed.		Phys. Ed. 200B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 200A	Contemporary American Life	3	Soc. St. 200B	Contemporary American Life	3
Ed. 201	Human Dev. & Behavior, I	3	Ed. 202	Human Dev. & Behavior, II	3
Mus. 100	Music Appreciation	2	H. Ed. 100	Healthful Living	2
Electives		4	Electives		4
SPAN. 201	HISTORY & LITERATURE OF THE PERIOD OF CONQUEST AND COLONIZATION OF HISPANIC AMERICA	4	SPAN. 202	LITERATURE AND HISTORY OF CONTEMPORARY HISPANIC-AMERICA	4
		16½			16½

JUNIOR YEAR

Ed. 303	Teacher in School & Community	3	Ed. 304	Prins. & Techs. of Sec. Ed.	3
Math. 300	Social Uses of Mathematics	2	Eng. 100G	Western World Literature	3
Lang. 300	Foundations of Language	2	Math. 400	Statistics	2
Electives		5	Electives		4
SPAN. 301	THE PROSE OF THE GOLDEN AGE	4	SPAN. 302	THE DRAMA OF THE GOLDEN AGE	4
		16			16

SENIOR YEAR

Ed. 401	Development of Educational Thought	3	Ed. 403	Student Teaching	8
Elective—Mathematics or Science		2	Ed. 4—Education	Elective	3
Electives		4	Elective—Humanities		2
SPAN. 401	TEACHING OF SPANISH IN SECONDARY SCHOOLS	3	SPAN. 404	SURVEY OF SPANISH POETRY	2
SPAN. 402	SPANISH GRAMMAR FOR TEACHERS	4			15
		16			

Total: 128 semester-hours

THE DEPARTMENT OF HOME ECONOMICS

The Department of Home Economics has a two-fold purpose: (1) to improve individual and family living and (2) to prepare students for a career in teaching home economics in elementary and secondary schools.

Graduates with this major receive a vocational certificate enabling them to teach in either a general or vocational home economics program in New Jersey. They also are prepared to teach any or all of the areas generally accepted as comprising home economics; i.e., foods and nutrition, clothing and textiles, family finance, home management and equipment, family relations, and child development.

Although the Department of Home Economics offers no minor, it invites and welcomes students from other departments to elect courses in home economics.

The Home Economics Department has planned experiences for majors to supplement classroom work. They are as follows:

1. *Sumner Clothing Practicum*

After having completed HOME ECONOMICS 102, *Introduction to Clothing Construction*, garments are to be constructed during the summer months. The instructor assists each student in planning and evaluating this experience. These garments are submitted for evaluation during the first week of the semester in which the student is enrolled in HOME ECONOMICS 204, *Advanced Clothing Selection and Construction*.

2. *Summer Work Practicum*

Students supplement course work with actual work experience. This consists of at least 300 hours of summer employment, with or without pay, in a selected area to meet the student's educational needs. Usually this can be accomplished by eight weeks of employment. Preferably this work should be done during the summer preceding the senior year. Students should sign up with the Department Chairman during the spring semester. This experience is evaluated during the first two weeks of the fall semester of the senior year.

3. *Faculty Teas*

Each student is responsible for planning, organizing, and supervising the serving of at least one faculty tea. Preferably this should occur during the junior and senior years.

4. *Observations in College High School*

Junior and senior students observe and participate in College High School through demonstrations, arrangement of bulletin boards, and laboratory supervision. This correlates with class work in HOME ECONOMICS 401A and 401B.

Students majoring in home economics are not permitted to hold off-campus jobs that interfere with the normal activities of teaching during junior or senior practicum. Residence in the home-management house requires participation in activities that generally prevent part-time employment off campus.

HOME ECONOMICS MAJOR FRESHMAN YEAR

<i>Fall Semester</i>		<i>S.H.</i>	<i>Spring Semester</i>		<i>S.H.</i>
Phys. Ed. 100A	Phys. Ed.		Phys. Ed. 100B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 100A	Dev. of World Civ.	3	Soc. St. 100B	Dev. of World Civ.	3
Speech 100D	Fund. of Speech	3	Eng. 100C	Fund. of Writing	3
F.A. 100	Intro. to Visual Arts	3	Music 100	Music Appreciation	2
Ed. 100	Mental Hygiene & Personal Adj.	2	Science 100C	The Earth Sciences	2
Chem. 103	Chemistry for Home Economics, I	3	Chem. 104	Chemistry for Home Economics, II	3
H.E. 101	INTRODUCTION TO HOME ECONOMICS	2	H.E. 102	INTRO. TO CLOTHING CONSTRUCTION or	3
		16½	H.E. 201	INTRO. TO FOODS & NUTRITION	
					16½

SUMMER CLOTHING PROJECT SOPHOMORE YEAR

Phys. Ed. 200A	Phys. Ed.		Phys. Ed. 200B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 200A	Contemp. Am. Life	3	Soc. St. 200B	Contemp. Am. Life	3
Ed. 201	Human Dev. & Behav., I	3	Ed. 202	Human Dev. & Behav., II	3
Elective		2	Elective		2
Biol. 209	HUMAN BIOLOGY	3	Biol. 210	ELEMENTARY BACTERIOLOGY	4
H.E. 102	INTRO. TO CLOTHING CONSTRUCTION or	3	H.E. 304	HOME MANAGEMENT & HOUSEHOLD EQUIPMENT	2
H.E. 201	INTRO. TO FOODS & NUTRITION		H.E. 301	THE CHILD IN THE FAMILY or	3
H.E. 301	THE CHILD IN THE FAMILY or	3	H.E. 302	MARRIAGE & FAMILY RELATIONS	
H.E. 302	MARRIAGE & FAMILY RELATIONS				17½
		17½			

SUMMER WORK EXPERIENCE JUNIOR YEAR

Ed. 303	Teacher in School & Community	3	Ed. 304X	Prins. & Methods of Teaching	3
H.E. 202	MEAL PLANNING	3	Ed. 403A	Student Teach. & Jr. Practicum (4 wks. off campus)	3
H.E. 204	ADVANCED CLOTHING SELECTION AND CONSTRUCTION	3	H.E. 305	FAMILY FINANCE	2
H.E. 401A	HOME ECONOMICS EDUCATION, I (Junior Methods)	0	Lang. 300	Foundations of Language	2
H.E. 203	TEXTILES	2	PREPARATION FOR RESIDENCE		0
H.E. 303	HOUSING & HOME FURNISHINGS	3	H.E. 401B	HOME ECONOMICS EDUCATION, II (Senior Methods)	3
Elective		2	Elective		2
		16			15

SENIOR YEAR

Ed. 401	Dev. of Ed. Thought	3	Ed. 4—	Education Elective	3
H.E. 403	HOME MANAGEMENT HOUSE RES.	3	Elective—	Humanities	2
Ed. 403B	Student Teaching (6 weeks off campus)	5	Math. 400	Educational Statistics	2
Eng. 100G	Western World Lit.	3	H.E. 402	NUTRITION & GROUP FEEDING	2
Elective		2	Elective		2
		16	H.E. 404	VOCATIONAL EDUCATION	2
					13

Total: 128 semester-hours

THE DEPARTMENT OF INDUSTRIAL ARTS

The Industrial Arts Department emphasizes the relation of the cultural aspects of arts to the development of civilization and the vital part that industry plays in the life of each of us today. Creative satisfaction resulting from well-designed and carefully executed projects are provided for in the experience the student finds in this area.

The industrial arts program of the College offers opportunities for the student to broaden his concepts of the industrial world in which he lives. This is achieved through experiences in the graphic arts and drawing, woods and crafts, and metals and powers areas. It is presupposed that the student enrolling in the industrial arts program has had preliminary training. In addition to increasing the above knowledges and skills, the student is directed in the techniques of teaching industrial arts in the elementary, junior, and senior high schools.

Students applying for admission to the industrial arts program are encouraged to gain industrial experiences through actual contact with industrial firms. Students who complete this curriculum are prepared to teach industrial arts in the elementary schools, junior high schools, and the senior high schools of New Jersey.

INDUSTRIAL ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 100A <i>Dev. of World</i>		Soc. St. 100B <i>Dev. of World</i>	
<i>Civilization</i>	3	<i>Civilization</i>	3
Music 100 <i>Music Appreciation</i> ..	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Eng. 100C <i>Fundamentals of</i>		Sci. 100A <i>Physical Science</i> or	
<i>Writing</i>	3	Sci. 100B <i>Biological Science</i> ..	4
Sci. 100C <i>The Earth Sciences</i> ..	2	Ed. 100 <i>Mental Hygiene &</i>	
I.A. 101 <i>INTRO. TO INDUSTRIAL</i>		<i>Pers. Adj.</i>	2
<i>ARTS</i>	2	I.A. 112 <i>GRAPHIC ARTS &</i>	
I.A. 111 <i>GRAPHIC ARTS &</i>		<i>DRAWING, II</i>	4
<i>DRAWING, I</i>	4		<hr/>
	<hr/>		16½
	16½		

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 200A <i>Contemporary</i>		Soc. St. 200B <i>Contemporary</i>	
<i>American Life</i>	3	<i>American Life</i>	3
Ed. 201 <i>Human Dev. &</i>		Ed. 202 <i>Human Dev. &</i>	
<i>Behavior, I</i>	3	<i>Behavior, II</i>	3
H.Ed. 100 <i>Healthful Living</i>	2	Math. 300 <i>Social Uses of</i>	
I.A. 221 <i>WOOD AND CRAFTS, I</i> ..	4	<i>Mathematics</i>	2
I.A. 231 <i>METALS AND POWER, I</i> .	4	I.A. 222 <i>WOOD AND CRAFTS, II</i> ..	4
	<hr/>	I.A. 232 <i>METALS AND POWER, II</i>	4
	16½		<hr/>
			16½

INDUSTRIAL ARTS MAJOR

JUNIOR YEAR

Ed. 304X <i>Prins. & Methods of Teaching</i>	3	Ed. 303 <i>Teacher in School & Community</i>	3
I.A. 301 <i>PRINCIPLES OF INDUSTRIAL ARTS</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 wks. off campus)	3
I.A. 313 <i>GRAPHIC ARTS & DRAWING, III</i>	4	I.A. 302 <i>CURRICULUM & TEACHING OF I.A.</i>	2
I.A. 333 <i>METALS AND POWER, III</i>	4	I.A. 323 <i>WOOD AND CRAFTS, III</i>	4
Electives	4	Speech 100D <i>Fundamentals of Speech</i>	3
	17		15

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Lang. 300 <i>Foundations of Language</i>	2
Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5	Math. 400 <i>Statistics</i>	2
Eng. 100G <i>Western World Literature</i>	3	Ed. 4— <i>Education Elective</i>	3
Elective (Industrial Arts elective will be offered)	4	Elective— <i>Mathematics or Science</i>	2
	15	Elective— <i>Humanities</i>	2
		Elective—(Industrial Arts elective will be offered)	4
			15

Total: 128 semester-hours

THE DEPARTMENT OF MATHEMATICS

Prospective teachers of secondary-school mathematics are selected on the basis of personal interviews, written examinations, previous scholastic record, and recommendations from their respective high schools. Students thus selected can achieve a broad cultural background, a thorough understanding of their chosen field of work, and a good working knowledge of the problems, techniques, and methods of procedure in the teaching of mathematics in the secondary school.

Scholarship in mathematics can result only from continued study; it cannot result from a mere review of high-school courses. Hence, the course of study in mathematics provides for a study of topics in college mathematics with continual emphasis on their use as a background for teaching. Courses have been selected to the end that the students become proficient in various fields of mathematics.

MATHEMATICS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A <i>Physical Science</i> or Sci. 100B <i>Biological Science</i> ..	4	Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2
Mus. 100 <i>Music Appreciation</i> ..	2	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
MATH. 101 <i>MATHEMATICAL ANALYSIS, I</i>	4	MATH. 102 <i>MATHEMATICAL ANALYSIS, II</i>	4
	16 1/2		15 1/2

MATHEMATICS MAJOR

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. and Behavior, I</i>	3	Ed. 202 <i>Human Dev. and Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i> ..	2	Sci. 100C <i>The Earth Sciences</i> ..	2
Electives	4	Electives	4
MATH. 201 <i>CALCULUS, I</i>	4	MATH. 202 <i>CALCULUS, II</i>	4
	<hr/> 16½		<hr/> 16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i> ..	3
Lang. 300 <i>Foundations of Language</i>	2	Eng. 100G <i>Western World Literature</i>	3
Electives	4	Electives	4
MATH. 307 <i>INTRO. TO MATHEMATICAL STATISTICS</i>	3	MATH. 308 <i>THE TEACHING OF JUNIOR HIGH SCHOOL MATHEMATICS</i>	2
MATH. 302 <i>HIGHER ALGEBRA</i> ..	4	MATH. 301 <i>MODERN COLLEGE GEOMETRY</i>	4
	<hr/> 16		<hr/> 16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Math. or Science</i>	2	Ed. 4— <i>Education Elective</i>	3
Elective— <i>Humanities</i>	2	Elective	2
Elective	3	MATH. 404 <i>MODERN MATHEMATICAL LITERATURE</i>	2
MATH. 401 <i>THE TEACHING OF MATHEMATICS IN SECONDARY SCHOOL</i>	3		<hr/> 15
MATH. 402 <i>APPLICATIONS OF MATHEMATICS</i>	3		
	<hr/> 16		

Total: 128 semester-hours

Students selecting mathematics as a field of minor interest should consult with the Chairman of the Mathematics Department before beginning such work. The following courses are required for all mathematics minors: MATH. 101, 102, 201, 202, 401, and one two-point elective, making a total of 21 semester-hours.

MATH. 304 is required of mathematics majors and minors who do not demonstrate satisfactorily their proficiency in the geometry of three-dimensional Euclidean space. An opportunity to show this proficiency is provided at least twice each year.

All students in the College are required to take some mathematics courses as part of their requirements in general education. Selection of such courses often depends upon the student's major field. Students may also qualify for special work in mathematics by taking a placement examination. Most students take both MATH. 300 and 400 before taking an elective course in either mathematics or science. Non-mathematics majors may take MATH. 310 in lieu of MATH. 300. Mathematics majors take MATH. 308 and 307 instead of MATH. 300 and 400.

THE FIRST YEAR

The mathematics of the first year is organized as a single unit of work. The traditional subjects of college algebra, trigonometry, analytical geometry, and calculus are not treated as separate and distinct subjects. Rather they are interwoven, with some elementary logical concepts, into an integrated course in mathematical analysis and calculus which constitutes the first two years of work on a major.

THE SECOND YEAR

The study of differential and integral calculus and analytic geometry is continued in the second year. The entire year's work forms a unit sequential to that taken the first year.

THE THIRD YEAR

In the first semester, courses in *An Introduction to Mathematical Statistics* and *Higher Algebra* are required. The algebra course provides the student with preparation and confidence for the teaching of algebra in the high school. Foundations of algebra are introduced.

Modern College Geometry is required in the second semester. In this course the student learns more powerful methods and techniques for solving original exercises in geometry and gains experience in the construction of geometric proofs by analysis. Foundations of geometry are introduced.

Professionalization during this year is emphasized by increased demands on the student in making lucid explanations, and in ability to anticipate difficulties in teaching procedures. He now begins to participate actively in the classes in College High School as an assistant and is expected to help in diagnosing pupil difficulties and in providing remedial practice.

THE FOURTH YEAR

In the fourth year the course in *Application of Mathematics* gives the future teacher an effective background in the use of precision instruments. The course in the *Teaching of Mathematics in Secondary Schools* coordinates and brings to a focus all of the professionalization of his previous courses. Here his attention is concentrated solely on a careful study of the teaching of mathematics in secondary schools. He becomes acquainted with the literature of the teaching of mathematics and with discussions by leading teachers in mathematical periodicals. In supervised student-teaching the student puts into practice, under direction and supervision, in high-school classes, the theories and methods he has studied. Thus, we have the combination of sound scholarship in mathematics and an apprenticeship under successful high-school teachers.

THE DEPARTMENT OF MUSIC

The Department of Music offers a two-fold program:

1. A major in music education for students who wish to teach music in grades one through twelve.
2. Music courses as cultural background for general students.

The Music Major

The music major prepares the student to teach vocal or instrumental music, music appreciation, and music theory in the elementary and secondary schools. The curriculum includes four areas of subject-matter; music history and appreciation, music theory, applied music, and music pedagogy. Music majors pursue the same core curriculum throughout the freshman and sophomore years; thereafter, they choose differentiated curricula in instrumental or vocal emphasis. By use of free electives, it is possible for the instrumental student to elect vocal emphasis, or the vocal student to elect instrumental emphasis, thereby qualifying himself to teach in both areas.

Students who wish to major in music are required to have a preliminary conference with the Chairman of the Department, at which time they will discuss and demonstrate their qualifications for specialization in this field. Prospective music majors should have performance ability of promise on a primary and secondary instrument, good musicality, a knowledge of elementary music theory, and give evidence of serious music study throughout the high-school years.

MUSIC MAJOR—INSTRUMENTAL EMPHASIS

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 100A <i>Dev. of World</i>		Soc. St. 100B <i>Dev. of World</i>	
<i>Civilization</i>	3	<i>Civilization</i>	3
Eng. 100C <i>Fundamentals of</i>		Speech 100D <i>Fundamentals of</i>	
<i>Writing</i>	3	<i>Speech</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Sci. 100A <i>Physical Science or</i>	
Sci. 100C <i>The Earth Sciences</i> ..	2	Sci. 100B <i>Biological Science</i> ..	4
Ed. 100 <i>Mental Hygiene &</i>		H. Ed. 100 <i>Healthful Living</i>	2
<i>Personal Adj.</i>	2	MUS. 102 <i>SIGHT READING &</i>	
MUS. 101 <i>SIGHT READING & EAR</i>		<i>EAR TRAINING (3)</i>	2
<i>TRAINING (3)</i>	2	MUS. 104 <i>PRIMARY INSTRU-</i>	
MUS. 103 <i>PRIMARY INSTRU-</i>		<i>MENT, II</i>	1
<i>MENT, I</i>	1	MUS. 105B <i>SECONDARY INSTRU-</i>	
MUSIC 105A <i>SECONDARY INSTRU-</i>		<i>MENT, II</i>	½
<i>MENT, I</i>	½		
	17		16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 200A <i>Contemporary</i>		Soc. St. 200B <i>Contemporary</i>	
<i>American Life</i>	3	<i>American Life</i>	3
Ed. 201 <i>Human Development &</i>		Ed. 202 <i>Human Development &</i>	
<i>Behavior, I</i>	3	<i>Behavior, II</i>	3
MUS. 201 <i>HARMONY, I</i>	3	Elective	2
MUS. 203 <i>PRIMARY INSTRU-</i>		MUS. 202 <i>HARMONY, II</i>	3
<i>MENT, III</i>	1	MUS. 204 <i>PRIMARY INSTRU-</i>	
MUS. 205A <i>STRING INSTRU-</i>		<i>MENT, IV</i>	1
<i>MENTS, I (2)</i>	1	MUS. 208 <i>EPOCHS IN MUSICAL</i>	
MUS. 207 <i>EPOCHS IN MUSICAL</i>		<i>DEVELOPMENT, II</i>	2
<i>DEVELOPMENT, I</i>	2	MUS. 210B <i>SECONDARY INSTRU-</i>	
MUS. 210A <i>SECONDARY INSTRU-</i>		<i>MENT, IV</i>	½
<i>MENT, III</i>	½	ENSEMBLE	1
ENSEMBLE	1	MUS. 206A <i>WOOD WIND INSTRU-</i>	
	15	<i>MENTS (2)</i>	1
			17

MUSIC MAJOR—INSTRUMENTAL EMPHASIS

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus)	3
Elective Humanities (free elective—1)	2	Lang. 300 <i>Foundations of Language</i>	2
Elective	2	MUS. 205B <i>STRING INSTRUMENTS, II</i> (2)	1
MUS. 303 <i>PRIMARY INSTRUMENT, V</i>	1	MUS. 304 <i>PRIMARY INSTRUMENT, VI</i>	1
MUS. 306A <i>SCHOOL ORCHESTRAS</i>	2	MUS. 305 <i>ORCHESTRATION</i>	2
MUS. 307 <i>FORM & ANALYSIS</i>	2	MUS. 306B <i>SCHOOL BANDS</i>	2
MUS. 309 <i>BRASS WIND INSTRUMENTS</i> (2)	1	MUS. 308 <i>VOICE CLASS FOR INSTRUMENTALISTS</i>	1
ENSEMBLE	1	ENSEMBLE	1
	<hr/> 16		<hr/> 16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 4— <i>Education Elective</i>	3
Ed. 403B <i>Student Teaching</i> (6 weeks off campus)	5	Eng. 100G <i>Western World Literature</i>	3
Elective	2	Math. 400 <i>Educational Statistics</i>	2
MUS. 206B <i>PERCUSSION INSTRUMENTS</i> (2)	1	Elective— <i>Mathematics or Science Electives</i>	5
MUS. 401 <i>METHODS OF TEACHING MUSIC IN SECONDARY SCHOOLS</i>	3	MUS. 402B <i>PRIMARY INSTRUMENT, VIII</i>	$\frac{1}{2}$
MUS. 402A <i>PRIMARY INSTRUMENT, VII</i>	$\frac{1}{2}$	ENSEMBLE	$\frac{1}{2}$
ENSEMBLE	$\frac{1}{2}$		<hr/> 16
	<hr/> 15		

Total: 128 semester-hours

MUSIC MAJOR—VOCAL EMPHASIS

FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	$\frac{1}{2}$	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Sci. 100A <i>Physical Science</i> or	
Sci. 100C <i>The Earth Sciences</i> ..	2	Sci. 100B <i>Biological Science</i> ..	4
Ed. 100 <i>Mental Hygiene & Personal Adj.</i>	2	H. Ed. 100 <i>Healthful Living</i> ...	2
MUS. 101 <i>SIGHT READING & EAR TRAINING</i> (3)	2	MUS. 102 <i>SIGHT READING & EAR TRAINING</i> (3)	2
MUS. 103 <i>PRIMARY INSTRUMENT, I</i>	1	MUS. 104 <i>PRIMARY INSTRUMENT, II</i>	1
MUS. 105A <i>SECONDARY INSTRUMENT, I</i>	$\frac{1}{2}$	MUS. 105B <i>SECONDARY INSTRUMENT, II</i>	$\frac{1}{2}$
	<hr/> 17		<hr/> 16

MUSIC MAJOR—VOCAL EMPHASIS

SOPHOMORE YEAR

Phys. Ed. 200A *Phys. Ed.*

<i>Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Development & Behavior, I</i>	3
MUS. 201 HARMONY, I	3
MUS. 203 PRIMARY INSTRUMENT, III	1
MUS. 205A STRING INSTRUMENTS, I (2)	1
MUS. 207 EPOCHS IN MUSICAL DEVELOPMENT, I	2
MUS. 210A SECONDARY INSTRUMENT, III	½
ENSEMBLE	1
	<hr/> 15

Phys. Ed. 200B *Phys. Ed.*

<i>Activities</i>	½
Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 202 <i>Human Development & Behavior, II</i>	3
Elective	2
MUS. 202 HARMONY, II	3
MUS. 204 PRIMARY INSTRUMENT, IV	1
MUS. 208 EPOCHS IN MUSICAL DEVELOPMENT, II	2
MUS. 210B SECONDARY INSTRUMENT, IV	½
ENSEMBLE	1
MUS. 205B STRING INSTRUMENTS, II (2)	1
	<hr/> 17

JUNIOR YEAR

Ed. 303 <i>The Teacher in School and Community</i>	3
Math. 300 <i>Social Uses of Math.</i>	2
Elective Humanities (free elective—1)	2
MUS. 301 CHORAL TECHNIQUE ..	2
MUS. 303 PRIMARY INSTRUMENT, V	1
MUS. 307 FORM & ANALYSIS ...	2
MUS. 310A SECONDARY—PIANO ..	½
MUS. 320 TEACHING MUSIC IN THE ELEMENTARY SCHOOL	3
ENSEMBLE	1
	<hr/> 16½

Ed. 304X <i>Prins. & Methods of Teaching</i>	3
Ed. 403A <i>Student Teaching—Junior Practicum</i> (4 weeks off campus)	3
Eng. 100G <i>Western World Lit.</i> ..	3
Lang. 300 <i>Foundations of Language</i>	2
MUS. 304 PRIMARY INSTRUMENT, VI	1
MUS. 305 ORCHESTRATION	2
MUS. 310B SECONDARY—PIANO ..	½
ENSEMBLE	1
	<hr/> 15½

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ..	3
Ed. 403 <i>Student Teaching</i> (6 weeks off campus)	5
Elective	2
MUS. 401 METHODS OF TEACHING MUSIC IN SECONDARY SCHOOLS	3
MUS. 402A PRIMARY INSTRUMENT, VII	½
MUS. 429 A CAPPELLA CHOIR & CHORAL CONDUCTING	2
ENSEMBLE	½
	<hr/> 16

Ed. 4— <i>Education Elective</i>	3
Math. 400 <i>Educational Statistics</i> ..	2
Elective—Mathematics or Science	2
Electives	7
MUS. 402B PRIMARY INSTRUMENT, VIII	½
ENSEMBLE	½
	<hr/> 15

Total: 128 semester-hours

Applied Music

Music majors choose a primary and a secondary instrument in applied music; one shall be piano. Other primary instruments may be organ, voice, violin, or other band and orchestra instruments. The primary instrument represents the student's greatest talent and accomplishment; the secondary instrument, lesser talent and accomplishment. Every music major will give a graduation recital on his primary instrument in the senior year. Students receive a one-hour private lesson on the primary instrument and a half-hour private lesson (or equivalent class lesson) on the secondary instrument each week.

All music students will study with the applied music teachers provided by the College.

Entrance Requirements in Primary Instruments

1. Piano
 - a. Play from memory all major and harmonic minor scales, four octaves, hands together and I, IV, and V chords inversions in each key.
 - b. A little prelude or two part invention by J. S. Bach.
 - c. An easy sonata by Haydn, Mozart, or Beethoven, played from memory.
 - d. Composition by Romantic or modern composer of student's choice.
2. Voice
 - a. A good natural voice above the average in quality and range; good intonation and clear diction.
 - b. Two songs of the student's choice selected from standard voice repertory, such as a simple art song, an air from an oratorio, or an aria from an opera, one of which shall be sung in English.
 - c. A minimum of two years of piano study.
 - d. Knowledge of French or German is recommended.
3. Violin
 - a. Play from memory all major and melodic minor scales, three octaves.
 - b. An etude selected from Dont. Op. 37 or Kreutzer, Number 2-20, or equivalent.
 - c. A first movement selected from the following concertos: Viotti, Numbers 22, 23; DeBeriot, Number 9; or Vivaldi, A minor; or two movements from a sonata by Handel, Corelli, or Tartini.
 - d. A composition chosen by the student from the classic repertory.
4. Clarinet
 - a. Play from memory all major and melodic minor scales, three octaves, moderate tempo.
 - b. Completion of a substantial portion of one of the standard clarinet methods: Baermann, Lazerus, Langenous, Klose, or equivalent.
 - c. An etude chosen from Baermann, Bk. IV, characteristic studies, Klose, or equivalent.
 - d. A composition chosen by the student from the classic repertory.
5. Trumpet or Cornet
 - a. Play from memory without music, all major, and melodic minor scales, two octaves where possible.
 - b. Completion of a substantial portion of Arban's Method for the Trumpet or equivalent.
 - c. An etude chosen from the Twelve Characteristic Etudes, Arban.
 - d. A composition chosen by the student from the classic repertory.

ENTRANCE REQUIREMENTS IN PIANO, SECONDARY INSTRUMENT

1. Evidence of the satisfactory completion of the Oxford *Older Beginner's Book* or equivalent.
2. All major scales, two octaves, hands together; and all principal triads, in all positions, hands separate, played from memory.
3. Two of the following compositions:
 - a. Minuet in G, Bach, *Classics Albums, Book I*, B. F. Wood Music Co.
 - b. Sonatina in G, Beethoven, *op. cit.*
 - c. Melody, Schumann, *op. cit.*
4. Ability to sightread simple material of the difficulty of Hannah Smith, *Sightreading Exercises*, Parts 1 through 4, Schroeder & Gunther.

This requirement represents one year of serious music study.

Entrance requirements for the other secondary instruments may be had upon request.

A student will be admitted with a condition in his secondary instrument provided he has compensatory performance abilities on other instruments. A condition on the secondary instrument, however, must be removed during the first year. A student will not be permitted to enter the sophomore year until the condition has been removed. Instruction on sub-credit bearing secondary instruments will be taken at the student's expense and from approved teachers.

All instruction in applied music taken during the summer session and all instruction required to make up failures in applied music will be taken at the student's expense.

Music majors will do four weeks of student teaching in grades one through six in the spring semester of their junior year, and six weeks of student teaching in grades seven through twelve in the fall semester of their senior year. Experience is given in teaching both vocal and instrumental music.

ENTRANCE REQUIREMENTS FOR STUDENT TEACHING

I. For Junior Student Teaching

Regardless of vocal or instrumental emphasis, all music majors are required to complete Mus. 210B, *Secondary Piano*, before junior student teaching and, in addition, to meet the following minimum performance standards with an average grade of not less than C:

- A. Give evidence of a working knowledge of practical keyboard harmony; ability to harmonize and transpose a simple melody; chord with primary chords in any major or minor key.
- B. Sing and play five folk songs suitable for use in the elementary grades.
- C. Play four community songs, two of which shall be "America" and "America the Beautiful" from memory.

II. For Senior Student Teaching

Regardless of vocal or instrumental emphasis, all music majors are required to meet the following minimum requirements in Secondary (piano) with an average of not less than C:

- A. Play an easy selection on any instrument other than the primary or secondary instrument.
- B. Play at sight a song suitable for use in the junior high school.
- C. Play six community songs, three of which shall be "America," "America the Beautiful," and "The Star Spangled Banner." The latter three shall be played from memory.

ENSEMBLE

All music majors participate in the ensemble of the primary instrument through the four years. Regardless of the primary instrument, all music majors participate in choral organizations during the freshman and sophomore years. Thereafter, they may elect membership in other organizations. Ensemble credit is not given for the freshman year. Thereafter, a maximum of five semester-hours may be earned. Students may not participate in three organizations either with or without credit without securing special permission from the Chairman of the Music Department.

RECITALS

Faculty recitals and Senior Graduation recitals are given on Sunday evenings in Edward Russ Hall and Chapin Hall and in the Memorial Auditorium. Student recitals are given bimonthly on Friday afternoons. All music students are required to perform in recitals as directed by their applied music teachers and to attend at least two-thirds of these recitals.

Music for the General Student

The cultural obligation of the teacher has long been recognized. Teacher education has become increasingly a matter of providing rich cultural backgrounds upon which the teaching of a given subject may be projected. For this reason all students except music majors are required to take Mus. 100, *Music Appreciation*. In addition, the general student may elect courses in music history and literature in the junior and senior years. Whenever possible, the content of these courses is related to the student's major field.

THE FIRST YEAR

The student begins his career as a music major with *Sight Reading and Ear Training*, the primary and secondary instruments, and participates in the various musical organizations of the College.

THE SECOND YEAR

In the second year the music major continues on primary and secondary instruments, begins work on string and woodwind instruments, and takes *Harmony and Epochs in Musical Development*.

THE THIRD YEAR

The first two years of the music major have been devoted to developing skills in applied music and to sequential courses in music theory and history. In the third year the skills and knowledge are applied in professionalized subject-matter courses in choral and instrumental school music. Junior music majors go out for one week of observation in the elementary schools in the first semester, and four weeks of student teaching in grades 1-6 in the second.

THE FOURTH YEAR

In the first semester of the senior year the music major continues professional preparation in his field of special interest and goes out for six weeks of student teaching in grades 7-12. After student teaching, the music major returns to the campus for the second semester to carry his professional preparation still farther by electing courses in music and related fields and by giving his graduation recital.

PANZER SCHOOL OF PHYSICAL EDUCATION AND HYGIENE

History

Panzer College of Physical Education and Hygiene was founded in September, 1917. Its inception followed passage of The Pierson Act, a law which made physical education compulsory in the public schools of the State. The founders were men and women interested in a program of teacher-education to provide instructors in physical training and hygiene for the public schools.

Established in Newark—where it was known as the Newark Normal School of Physical Education and Hygiene—the institution offered a two-year course for men and women planning to teach physical education and hygiene.

In 1919 the Board of Trustees named Henry Panzer President. In 1926, the school was relocated in East Orange. In 1928, the State Board of Education approved a four-year course and authorized the College to grant the degree of Bachelor of Physical Education. In the same year, the name was changed to Panzer College of Physical Education and Hygiene. In 1939, the State Board authorized the conferral of the degree of Bachelor of Science in Education.

The College functioned under direction of a seven-member board of trustees. Active alumni and an auxiliary-patrons association provided support of the program and activities of the institution.

From 1921 through the academic year, 1957-1958, Dr. Margaret C. Brown served as College president. An outstanding leader, Dr.

Brown is the recipient of many awards from local and national organizations in the field of health, recreation, and physical education.

In 1958—when Panzer realized the need for increasing the number of physical education teachers but could not expand its facilities—the Board of Trustees of the College requested that the Panzer program be incorporated with Montclair State College. The State Board—recognizing the fact that Montclair offered a minor in physical education and that a new gymnasium had recently been completed on its campus—deemed the request “in the best interests of the educational program of the State.” Therefore, on February 5, the State Board adopted a resolution stipulating that, effective August 1, 1958, Panzer College be consolidated with Montclair State College.

As a result of the merger, Panzer College became the Panzer School of Physical Education and Hygiene at Montclair State College. All Panzer students in good academic standing became eligible for transfer and matriculation. The Panzer library, laboratory, and academic equipment were moved to the Montclair campus.

Objectives

In addition to the general objectives and standards of the College which appear on page 21 of this bulletin and apply fully to all students, the specific objectives of the Panzer School are as follows:

1. To provide a diversified program of high professional quality which will enable the student to develop those traits, qualities, and characteristics which will enable him to function effectively as an individual, as a teacher, and as a member of his community.
2. To supply leadership in programs of recreation for schools, camps, playgrounds, recreation centers, and other agencies.
3. To provide a well-rounded service program for all students. Emphasis is placed on developing an understanding of physical education, developing skills for use in future leisure hours, and presenting those activities which provide immediate conditioning and recreational benefits.
4. To offer for all students opportunities for participation in a wide variety of well-directed sports and related activities in intramural and intercollegiate competition and in sports and dance clubs.

Admission Requirements

Admission to The Panzer School follows the same pattern as that set forth for all students entering Montclair State College. There is, however, the additional provision that each student who is accepted in this specialized area must pass a battery of physical education tests. These tests are administered by the faculty and are designed to measure coordination, rhythm, and general motor ability.

Though there are no specific high school courses or activities beyond those required for general admission to the College, Panzer School applicants are advised to include chemistry and biology in their high-school program.

Broad participation in varsity sports, intramurals, and other extracurricular activities is recommended. Camping experience and participation in various recreational activities are also desirable.

PHYSICAL EDUCATION AND HYGIENE

W. R. A.

The sport and athletic activities for women are under the direction of the Women's Recreation Association. This active student organization sponsors programs in basketball, volleyball, field hockey, softball, archery, tennis, badminton, and fencing. Membership in these activities is open to all the women students of the college. In addition, W.R.A. sponsors a variety of experiences in intramural competition, sports days, dorm playdays, and invitation games with other colleges. Cheerleaders and twirlers are selected on a competitive basis early in the fall of the year.

Club and Team Requirement

Opportunities for participation in varsity sports, sports clubs, and intramural activities are available to all students of the college. A variety of dance clubs is also scheduled.

Students majoring in physical education are required to participate in a number of these activities to develop proficiency and learn more about them than is possible in the regular course offerings.

Camping Requirement

Each student majoring in physical education is required to attend a camp session conducted at the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest. Students attend for twelve days in June of the freshman summer and again in June of the sophomore summer.

Skills and techniques in camp programming and leadership are studied and practiced, and the program of aquatic activities can lead to Red Cross certification in swimming and life saving. Camp craft, arts and crafts, boating and canoeing, and outpost camping are among the other activities included in the program.

Gymnasium Costumes

The wearing of proper gymnasium attire is considered important, and a regulation costume is prescribed for each activity.

The costume required in physical education activities classes is purchased at the Student Supply Store on campus. The cost is approximately \$15.00 and includes a textbook and regulation lock. Under normal circumstances these items will last for two years.

The costumes for major students include items necessary to participate in a variety of activities and are ordered by each individual. Itemized lists on order blanks are provided to have the order filled for the opening of college. The approximate cost is \$50.00 for men and \$60.00 for women. These generally last four years.

The Major Program

The courses for the major in physical education are set up in terms of the outline of requirements of the Curriculum Commission Report of 1956 as adopted by the State Board of Education. In this plan, 48 semester-hours are devoted to General Education, 15 to Basic Professional Education, 12 to Free Electives, and 53 to Specialization in Physical Education. Satisfactory completion of the approved course of study leads to certification to teach health and physical education in elementary and secondary schools.

PHYSICAL EDUCATION MAJOR
PROGRAM OF COURSES FOR MEN
FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Soc. St. 100A <i>Dev. of World Civ.</i> , I	3	Soc. St. 100B <i>Dev. of World Civ.</i> , II	3
Mus. 100 <i>Music Appreciation</i> ...	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2	Speech 100D <i>Fund. of Speech</i> ..	3
Eng. 100C <i>Fund. of Writing</i> ...	3	H. Ed. 100 <i>Healthful Living</i> ...	2
Chem. 105 <i>Chem. for Phys. Ed.</i> , I	3	Chem. 106 <i>Chem. for Phys. Ed.</i> , II	3
P.E.M. 100C <i>ATHLETIC GAMES & SPORTS</i> , I	1	P.E.M. 100D <i>ATHLETIC GAMES & SPORTS</i> , II	1
P.E.M. 100E <i>FUNDAMENTALS OF GYMNASTICS</i> , I	1	P.E.M.-100F <i>FUNDAMENTALS OF GYMNASTICS</i> , II	1
P.E. 100G <i>FOLK, SQUARE & SOCIAL DANCE</i> , I	1	P.E. 100H <i>FOLK, SQUARE & SOCIAL DANCE</i> , II	1
P.E. 102 <i>GRADED GROUP GAMES</i>	1		17

17

P.E.230 CAMPING AND OUTDOOR EDUCATION, I-1
SOPHOMORE YEAR

Soc. St. 200A <i>Contemp. Am. Life</i> , I	3	Soc. St. 200B <i>Contemp. Am. Life</i> , II	3
Ed. 201 <i>Human Dev. & Behav.</i> , I	3	Ed. 202 <i>Human Dev. & Behav.</i> , II	3
Sci. 100C <i>The Earth Sciences</i> ..	2	P.E. 204 <i>KINESIOLOGY</i>	2
BIOL. 212 <i>MAMMALIAN ANATOMY FOR PHYS. ED.</i>	3	BIOL. 214 <i>PHYSIOLOGY FOR PHYS. ED.</i>	3
P.E.M. 200C <i>ATHLETIC GAMES & SPORTS</i> , III	1	P.E.M. 200D <i>ATHLETIC GAMES & SPORTS</i> , IV	1
P.E. 203A <i>INDIVIDUAL & DUAL SPORTS</i> , I	1	Electives	3
Electives	4		15

17

P.E. 330 CAMPING AND OUTDOOR EDUCATION, II-1
JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Principles & Methods of Tchg.</i>	3
Math. 300 <i>Social Uses of Math.</i>	2	Eng. 100G <i>Western World Lit.</i> ..	3
*P.E. 202 <i>HISTORY & PRINCIPLES OF PHYS. ED.</i>	3	Math. 400 <i>Educational Statistics</i>	2
P.E.M. 309 <i>COACHING AND OFFICIATING</i> , I	1	P.E.M. 310 <i>COACHING AND OFFICIATING</i> , II	1
*P.E. 201 <i>PHYSIOLOGY OF EXERCISE</i>	2	*P.E. 301 <i>ADAPTED PHYS. ED.</i> ..	2
P.E. 101 <i>ACTIVITIES & METHODS FOR ELEMENTARY GRADES</i> ...	3	P.E. 203B <i>INDIVIDUAL & DUAL SPORTS</i> , II	1
		Elective— <i>Humanities</i>	2
		*Lang. 300 <i>Found. of Lang.</i>	2

14

16

*½ class takes this the first semester and ½ class second semester.

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ..	3	Ed. 403 <i>Student Teaching</i>	8
P.E.M. 203C <i>INDIVIDUAL AND DUAL SPORTS</i> , III	1	Ed. 4— <i>Education Elective</i>	3
P.E. 405 <i>METH. & MATERIALS OF PHYS. ED. IN SECONDARY SCHOOLS</i>	4	H.Ed. M101 <i>FIRST AID</i>	2
P.E. 409 <i>ORG. & ADM. OF PHYS. ED.</i>	2	Elective	2
H.Ed. 401 <i>METH. & MATERIALS IN HEALTH ED. AND SAFETY</i> ..	2		15
Electives	3		

Total: 128 semester-hours

15

PHYSICAL EDUCATION MAJOR
PROGRAM OF COURSES FOR WOMEN
FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Soc. St. 100A <i>Dev. of World Civ., I</i> ..	3	Soc. St. 100B <i>Dev. of World Civ. II</i> ..	3
Mus. 100 <i>Music Appreciation</i> ..	2	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i> ..	2	Speech 100D <i>Fund. of Speech</i> ..	3
Eng. 100C <i>Fund. of Writing</i> ..	3	H.Ed. 100 <i>Healthful Living</i> ..	2
Chem. 105 <i>Chem. for Phys. Ed., I</i> ..	3	Chem. 106 <i>Chem. for Phys. Ed., II</i> ..	3
P.E.W. 100C <i>ATHLETIC GAMES & SPORTS, I</i> ..	1	P.E.W. 100D <i>ATHLETIC GAMES & SPORTS, II</i> ..	1
P.E.W. 100E <i>FUNDAMENTALS OF GYMNASTICS, I</i> ..	1	P.E.W. 100F <i>FUNDAMENTALS OF GYMNASTICS, II</i> ..	1
P.E. 100G <i>FOLK, SQUARE & SOCIAL DANCE, I</i> ..	1	P.E. 100H <i>FOLK, SQUARE & SOCIAL DANCE, II</i> ..	1
P.E. 102 <i>GRADED GROUP GAMES</i> ..	1		
	17		17

P.E.230 CAMPING AND OUTDOOR EDUCATION, I-1
SOPHOMORE YEAR

Soc. St. 200A <i>Contemp. Am. Life, I</i> ..	3	Soc. St. 200B <i>Contemp. Am. Life, II</i> ..	3
Ed. 201 <i>Human Dev. & Behavior, I</i> ..	3	Ed. 202 <i>Human Dev. & Behavior, II</i> ..	3
BIOL. 212 <i>MAMMALIAN ANATOMY FOR PHYS. ED.</i> ..	3	BIOL. 214 <i>PHYSIOLOGY FOR PHYS. ED.</i> ..	3
P.E.W. 200C <i>ATHLETIC GAMES & SPORTS, III</i> ..	1	P.E.W. 200D <i>ATHLETIC GAMES & SPORTS, IV</i> ..	1
P.E.W. 200G <i>MODERN DANCE, I</i> ..	1	P.E.W. 200H <i>MODERN DANCE, II</i> ..	1
P.E.W. 203A <i>INDIVIDUAL & DUAL SPORTS, I</i> ..	1	P.E. 204 <i>KINESIOLOGY</i> ..	2
Electives ..	4	Electives ..	3
	16		16

P.E.330 CAMPING AND OUTDOOR EDUCATION, II-1
JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i> ..	3	Ed. 304X <i>Principles & Methods of Tchg.</i> ..	3
Math. 300 <i>Social Uses of Math.</i> ..	2	Eng. 100G <i>Western World Lit.</i> ..	3
Lang. 300 <i>Found. of Language</i> ..	2	Math. 400 <i>Educational Statistics</i> ..	2
*P.E. 202 <i>HISTORY & PRINCIPLES OF PHYS. ED.</i> ..	3	*Sci. 100C <i>The Earth Sciences</i> ..	2
P.E.W. 311 <i>COACHING & OFFICIATING, I</i> ..	½	P.E.W. 312 <i>COACHING & OFFICIATING, II</i> ..	½
*P.E. 201 <i>PHYSIOLOGY OF EXERCISE</i> ..	2	*P.E. 301 <i>ADAPTED PHYSICAL EDUCATION</i> ..	2
P.E. 101 <i>ACTIVITIES & METHODS FOR ELEMENTARY GRADES</i> ..	3	P.E.W. 203B <i>INDIVIDUAL & DUAL SPORTS, II</i> ..	1
	15½	Elective— <i>Humanities</i> ..	2
			15½

*½ class takes this first semester and ½ class second semester.

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ..	3	Ed. 403 <i>Student Teaching</i> ..	8
H. Ed. 401 <i>METHODS & MATERIALS IN HEALTH ED. AND SAFETY</i> ..	2	Ed. 4— <i>Education Elective</i> ..	3
P.E. 405 <i>METHODS & MATERIALS OF PHYS. ED. IN SECONDARY SCHOOLS</i> ..	4	H.Ed. W101 <i>First Aid</i> ..	2
P.E. 409 <i>ORG. & ADM. OF PHYSICAL ED.</i> ..	2	Elective ..	2
Electives ..	3		
	14		15

Total: 128 semester-hours

College Athletics and Men's Intramurals

The College provides two athletic fields, three gymnasiums in the health, physical education, and recreation building, and an indoor archery and golf range, and other facilities for promoting sports and recreational activities. The principal sports for men normally include varsity teams in football, basketball, baseball, soccer, wrestling, track, tennis, golf and bowling. The College is affiliated with the National Association for Intercollegiate Athletics. Junior varsity teams are organized in several sports and play scheduled games within the state.

The program of athletics is governed by a student-faculty council. Funds are provided by the Student Government Association from student activity fees.

Additional sports activities are available for all male students in the Men's Intramural program. Leagues are organized in basketball and softball, and tournaments are scheduled in other sports.

The Minor Programs

Physical Education

The minor in Physical Education is no longer offered, but certain courses can be taken as electives with approval of the chairman of the department.

Health Education

Students completing the major in physical education will have the basic courses which will permit their certification in health education.

THE DEPARTMENT OF SCIENCE

Students who are interested in preparing to teach science in high school should consider carefully the present-day requirements for this work. As a result of investigations we have extensive information concerning the activities of science teachers in secondary schools. It is not wise for a student to take work in one science only since full-time teaching positions in a single subject are seldom open to a first-year teacher. Most beginners teach two or more science subjects and often a non-science subject as part of the instructional load. It is customary for a student to major in one branch of science and minor in another. The course sequences are arranged, therefore, so that science majors can enrich their science preparation by specializing in either biological or physical science through additional courses taken as electives in one of these two areas.

Since it is found by investigation that mathematics appears more frequently than any other subject in the combinations of subjects taught by science teachers, majors in science should include as many mathematics courses as possible in the undergraduate program.

SCIENCE MAJOR—BIOLOGICAL SCIENCE SPECIALIZATION

FRESHMAN YEAR

<i>Fal. Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fundamentals of Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
**Math. 103 <i>Mathematical Analysis, I</i>	3	**Math. 104 <i>Mathematical Analysis, II</i>	3
BIOL. 101 <i>GENERAL BOTANY, I</i> ..	4	BIOL. 102 <i>GENERAL BOTANY, II</i> ..	4
	<hr/> 16 1/2		<hr/> 15 1/2

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i> ..	2	Sci. 100C <i>The Earth Sciences</i> ..	2
BIOL. 201 <i>GENERAL ZOOLOGY, I</i> ..	4	BIOL. 202 <i>GENERAL ZOOLOGY, II</i> ..	4
CHEM. 101 <i>GENERAL COLLEGE CHEMISTRY, I</i>	4	CHEM. 102 <i>GENERAL COLLEGE CHEMISTRY, II</i>	4
	<hr/> 16 1/2		<hr/> 16 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i> ..	3
Mus. 100 <i>Music Appreciation</i> ...	2	Lang. 300 <i>Foundations of Language</i>	2
Electives	4	Electives	4
CHEM. 405 <i>ORGANIC CHEMISTRY, I</i> ..	4	CHEM. 406 <i>ORGANIC CHEMISTRY, II (or 4)</i>	3
PHYS. 101 <i>GENERAL COLLEGE PHYSICS, I</i>	4	PHYS. 102 <i>GENERAL COLLEGE PHYSICS, II</i>	4
	<hr/> 17		<hr/> 16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Eng. 100G <i>Western World Lit.</i> ...	3	Ed. 4. <i>Education Elective</i>	3
Elective	2	Elective—Humanities	2
SCI. 401 <i>TEACHING OF SCIENCE IN SECONDARY SCHOOL</i>	3	Elective	2
PHYS. 402 <i>MAGNETISM AND ELECTRICITY</i>	4		<hr/> 15
	<hr/> 15	Total: 128 semester-hours	

**Students who are planning to elect a course in *Calculus* during their college program are strongly advised to elect MATH. 101 and 102 in lieu of MATH. 103 and 104. Substitution of MATH. 101 and 102 for MATH. 103 and 104 will require the student to show proficiency in statistics either by examination or by completion of MATH. 400 sometime during the undergraduate program.

SCIENCE MAJOR—PHYSICAL SCIENCE SPECIALIZATION
FRESHMAN YEAR

<i>Fall Semester</i>		<i>S.H.</i>	<i>Spring Semester</i>		<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed.</i>			Phys. Ed. 100B <i>Phys. Ed.</i>		
<i>Activities</i>	$\frac{1}{2}$		<i>Activities</i>	$\frac{1}{2}$	
Soc. St. 100A <i>Development of World Civilization</i>	3		Soc. St. 100B <i>Development of World Civilization</i>	3	
Speech 100D <i>Fundamentals of Speech</i>	3		Eng. 100C <i>Fundamentals of Writing</i>	3	
F.A. 100 <i>Intro. to the Visual Arts</i>	3		Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2	
**Math. 103 <i>Mathematical Analysis, I</i>	3		**Math. 104 <i>Mathematical Analysis, II</i>	3	
CHEM. 101 GENERAL COLLEGE CHEMISTRY, I	4		CHEM. 102 GENERAL COLLEGE CHEMISTRY, II	4	
	<hr/>	16 $\frac{1}{2}$		<hr/>	15 $\frac{1}{2}$

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>			Phys. Ed. 200B <i>Phys. Ed.</i>		
<i>Activities</i>	$\frac{1}{2}$		<i>Activities</i>	$\frac{1}{2}$	
Soc. St. 200A <i>Contemporary American Life</i>	3		Soc. St. 200B <i>Contemporary American Life</i>	3	
Ed. 201 <i>Human Dev. & Behavior, I</i>	3		Ed. 202 <i>Human Dev. & Behavior, II</i>	3	
H. Ed. 100 <i>Healthful Living</i>	2		Sci. 100C <i>The Earth Sciences</i>	2	
PHYS. 101 GENERAL COLLEGE PHYSICS, I	4		PHYS. 102 GENERAL COLLEGE PHYSICS, II	4	
BIOL. 101 GENERAL BOTANY, I ..	4		BIOL. 102 GENERAL BOTANY, II (or 4)	3	
	<hr/>	16 $\frac{1}{2}$		<hr/>	15 $\frac{1}{2}$

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3		Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3	
Lang. 300 <i>Foundations of Language</i>	2		Mus. 100 <i>Music Appreciation</i> ..	2	
*Electives	4		Electives	4	
CHEM. 405 ORGANIC CHEMISTRY, I	4		CHEM. 406 ORGANIC CHEMISTRY, II	4	
BIOL. 201 GENERAL ZOOLOGY, I ..	4		BIOL. 202 GENERAL ZOOLOGY, II (or 4)	3	
	<hr/>	17		<hr/>	16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ..	3		Ed. 403 <i>Student Teaching</i>	8	
Eng. 100G <i>Western World Lit.</i> ..	3		Ed. 4.. <i>Education Elective</i>	3	
Elective	2		Elective—Humanities	2	
SCI. 401 TEACHING OF SCIENCE IN SECONDARY SCHOOL	3		Elective	2	
*PHYS. 402 MAGNETISM AND ELECTRICITY	4				15
	<hr/>	15			

Total: 128 semester-hours

*Those specializing in physics should take Physics 402 in place of an elective in the fall semester of the junior year. This will then leave four semester-hours more for electives in the fall semester of the senior year.

**Students who are planning to elect a course in *Calculus* during their college program are strongly advised to elect MATH. 101 and 102 in lieu of MATH. 103 and 104. Substitution of MATH. 101 and 102 for MATH. 103 and 104 will require the student to show proficiency in statistics either by examination or by completion of MATH. 400 sometime during the undergraduate program.

In addition to the minimum program outlined above, science

majors have a regular program of observations in the science classes in College High School. The program is so arranged that each student observes a *complete unit of work* each year. Observation assignments are as follows:

Freshman Year	Seventh or Eighth Grade General Science
Sophomore Year	Tenth Grade Biology
Junior Year	Eleventh Grade Chemistry or Twelfth Grade Physics
Senior Year	In the fall semester seniors pursue a program of observation and participation in conjunction with Sci. 401 and the Eighth Grade general science course.

MINORS IN SCIENCE

The Biological Science Minor

The following courses are required for a minor in biological science: BIOL. 101, 102, 201, 202, a two-point biology elective, and Sci. 401, making a total of 21 semester-hours.

The Physical Science Minor

The following courses are required for a minor in physical science: CHEMISTRY 101, 102, PHYSICS 101, 102, a two-point physical science elective, and SCIENCE 401, making a total of 21 semester-hours.

Students who major in another department and minor in a science field secure approval of the minor program by consultation with the Chairman of the Science Department.

THE FIRST YEAR

The first year is planned to give the student an insight into the role that science has played and is still playing in the drama of life. Specialization during this year begins with work in biology.

THE SECOND YEAR

The science work in this year is planned for students majoring in the department and for those minoring in the department. Those minoring in the department are advised to take BIOL. 101 and 102, or CHEM. 101 and 102, or PHYS. 101 and 102.

THE THIRD YEAR

The work in the third year is planned for those who major or minor in science and for those who wish to choose electives in the field of science.

THE FOURTH YEAR

All students majoring in the department are required to take Sci. 401, *The Teaching of Science in Secondary Schools*. This course, together with an increased amount of observation and participation in the College High School and with courses in the Education Department, serves as a means of coordinating the entire work of the department and of preparing the student for the work in supervised teaching he is to do in the succeeding semester. The staff members of the department cooperate with the Education Department in supervising this work.

THE DEPARTMENT OF THE SOCIAL STUDIES

The social studies teacher requires a very broad knowledge of the facts of social life, both past and present. He needs not only to know the facts, but to be able to think about them. Even more important, he must know how to impart his knowledge to younger people and to stimulate their thinking and civic interest. The secondary schools of today are rightfully expected to train for a citizenship which is alert, informed, and socially sensitive. The social studies teacher must bear a large responsibility for the accomplishment of this result.

The Social Studies Department offers a wide range of courses in the subject-matter fields aimed to provide the necessary range of knowledge. This department offers for all students, whether social studies majors or not, a course in *The Development of World Civilization* which presents a rapid survey of the civilizations of the past. For all students, there are, likewise, courses in *Contemporary American Life*.

Social Studies majors are required to take courses which are at once broad and thorough in those fields which the secondary-school teacher chiefly needs. Such are the courses in European history, American history, and those courses in economics, politics, and sociology which contribute so largely to an understanding of present-day problems, both American and international.

The aim is that in each of these fields, as the subject matter is studied, there shall also be considered the problems of teaching in that particular field. But in addition to this professionalization of subject-matter, every social studies major is required to take in the senior year a specialized course in the methods of teaching the social studies.

SOCIAL STUDIES MAJOR

FRESHMAN YEAR

Fall Semester		S.H.	Spring Semester		S.H.
Phys. Ed. 100A	Phys. Ed.		Phys. Ed. 100B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 100A	Dev. of World Civ.	3	Soc. St. 100B	Dev. of World Civ.	3
Eng. 100C	Fund. of Writing	3	Speech 100D	Fund. of Speech	3
Mus. 100	Music Appreciation	2	F.A. 100	Intro. to the Visual Arts	3
Sci. 100A	Physical Science or		Sci. 100C	The Earth Sciences	2
Sci. 100B	Biological Science	4	Ed. 100	Mental Hygiene &	
Soc. St. 101	DEV. OF MODERN		Pers. Adj.		2
EUROPE, I		4	Soc. St. 102	DEV. OF MODERN	
			EUROPE, II		3
		16½			16½

SOPHOMORE YEAR

Phys. Ed. 200A	Phys. Ed.		Phys. Ed. 200B	Phys. Ed.	
Activities		½	Activities		½
Soc. St. 200A	Contemp. Am. Life	3	Soc. St. 200B	Contemp. Am. Life	3
Ed. 201	Human Dev. &		Ed. 202	Human Dev. &	
Behavior, I		3	Behavior, II		3
Eng. 100G	Western World		H.Ed. 100	Healthful Living	2
Literature		3	Electives		4
Electives		4	Soc. St. 202	DEV. OF THE UNITED	
Soc. St. 201	DEV. OF THE UNITED		STATES, II		3
STATES, I		3			15½
		16½			

SOCIAL STUDIES MAJOR

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Math.</i> ..	2	Math. 400 <i>Statistics</i>	2
Electives	5	Lang. 300 <i>Found. of Lang.</i>	2
Soc. St. 301 <i>ECONOMICS</i> or		Electives	3
Soc. St. 302 <i>FIELD STUDIES IN URBAN LIFE</i>	3	Soc. St. 302 <i>FIELD STUDIES IN URBAN LIFE or</i>	
Soc. St. 304A <i>AMERICAN GOVERNMENT, I</i>	3	Soc. St. 301 <i>ECONOMICS</i>	3
		Soc. St. 304B <i>AMERICAN GOVERNMENT, II</i>	3
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Humanities</i>	2	Ed. 4— <i>Education Elective</i>	3
Electives	5	Elective— <i>Mathematics or Science</i> ..	2
Soc. St. 401 <i>TEACHING OF SOCIAL STUDIES IN SECONDARY SCHOOL</i> ..	3	Soc. St. 403 <i>SEMINAR IN SOCIAL STUDIES</i>	2
Soc. St. <i>AREA STUDY</i>	3		
	16		15

Total: 128 semester-hours

NOTE: 9 semester-hours of electives are required in a secondary teaching field other than the major.

Social studies majors are required to make at least sixty observations in the College High School, for the most part in the junior and senior years. In so far as it is possible, these observations should cover the range of high-school classes from the seventh to twelfth grades and should be so organized as to follow the development of entire teaching units.

THE FIRST YEAR

During the first year the social studies major, like all other students, takes a course in *The Development of World Civilization* to orient him in the field of social studies and to provide him with a background of understanding for all the social studies work of the future.

In addition, he begins his work as a social studies major by an intensive survey of European history.

THE SECOND YEAR

All students of the second year, social studies majors included, make a broad survey of current social, economic, and political problems. These courses carry to completion the work of the first year in *The Development of World Civilization*. Social studies majors continue their sectionalized preparedness with courses in American history.

THE THIRD YEAR

In this year the student comes into his electives, both in his own field of the social studies and in the fields of his chosen minors. Courses are offered in sociology, political science, economics, history, and field studies. All of these courses are rich with materials for his teaching in the contemporary fields of history, and especially in the field of twelfth-grade American history. The courses for students majoring in the social studies are 301, 302, 304A, and 304B.

THE FOURTH YEAR

The work of the fourth year serves to bring to a focus the work of the preceding years, as regards both subject-matter and the teaching of it. Social Studies majors during the first semester are given a systematic course in the *Methods of Teaching Social Studies*. They also take a course in a specific area of social studies specialization.

This preparation leads directly to actual teaching experience when, in the second semester, each major spends ten weeks in a secondary school teaching the social studies under the careful supervision of a teacher in that school and of members of the College staff.

Minors in the Field of the Social Studies

There are two minors in the field of the social studies; one in history, the other in political science and economics.

The courses in *The Development of World Civilization* (Soc. St. 100A and 100B) may be counted for six credits toward the twenty-one necessary to complete the minor in history. Soc. St. 201 and 202 and Soc. St. 101 and 102 and Soc. St. 401 must be used to complete the minor.

The courses in *Contemporary American Life* (Soc. St. 200A and 200B) may be used for six of the twenty-one credits necessary for the minor in political science and economics. The remaining twelve credits should consist of Soc. St. 301, 303, 304A, 304B, and 401. When it becomes possible to offer more elective courses, it is probable that other courses in the field of political science and economics will be available to those seeking a minor in that field.

THE DEPARTMENT OF SPEECH

The Speech Major

The Speech Department at Montclair recognizes the contribution of both the speech sciences and the speech arts. Thus, the speech major program prepares the prospective teacher to do speech correction and improvement work with students on all grade levels, and to teach and direct dramatics, public speaking, oral interpretation, and general speech throughout the secondary school. The program meets New Jersey certification requirements in two areas: (1) Teaching the Speech Defective K-12 and (2) Teaching Speech and Dramatics from grades 7 through 12. Clinical membership in the American Speech and Hearing Association may be attained.

Class work is supplemented by field trips, speech surveys in schools in New Jersey communities, laboratory teaching experience with fellow students and children who come to the campus for therapy in the Speech and Hearing Center, and general speech activity of all types. Internship programs in speech and hearing rehabilitation are available through affiliation with Mountainside Hospital, the North Jersey Training School, and other special centers and institutions. Players, a society open to the student body, provides opportunities in the field of dramatics. The Montclair Zeta Chapter of the national speech correction honor society, Sigma Alpha Eta, is one of the country's most active organizations in that area.

SPEECH MAJOR FRESHMAN YEAR

<i>Fall Semester</i>	<i>S.H.</i>
Phys. Ed. 100A <i>Phys. Ed.</i>	
Activities	1/2
Soc. St. 100A <i>Dev. of World Civ., I</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3
Ed. 100 <i>Ment. Hyg. & Pers. Adj.</i>	2
SPEECH 103 <i>VOICE & SPEECH</i>	
IMPROVEMENT	3
SPEECH 105A <i>INTRO. TO</i>	
DRAMATIC PROD., A	2
SPEECH 106 <i>INTRO. TO ORAL</i>	
INTERPRETATION	2
	<hr/> 15 1/2

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>	
Activities	1/2
Soc. St. 200A <i>Contemp. Am. Life, I</i>	3
Ed. 201 <i>Human Dev. &</i>	
<i>Behavior, I</i>	3
Sci. 100C <i>The Earth Sciences</i> ..	2
Electives	3
*a) SPEECH 435 <i>STAGECRAFT or</i> ..	2
b) Ed. 472 <i>ELEM. SCHOOL</i>	
<i>CURRICULUM</i>	
SPEECH 208 <i>ANATOMY & PHYSIO-</i>	3
<i>LOGY OF THE VOCAL &</i>	
<i>AUDITORY MECHANISMS</i>	
	<hr/> 16 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School &</i>	
<i>Community</i>	3
Math. 300 <i>Social Uses of Math.</i> ..	2
Elective	2
#Ed. 452 <i>Psych. and Ed. of the</i>	
<i>Handicapped</i>	3
SPEECH 410 <i>SPEECH PATHOLOGY</i>	2
SPEECH 461A <i>PRACTICUM IN</i>	
<i>SPEECH CORR., I</i>	2
SPEECH 456 <i>PLAY DIRECTION</i> ...	2
	<hr/> 15

#(Education elective suggested for Speech majors and minors)

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i>	3
Lang. 300 <i>Found. of Language</i> ..	2
Math. 400 <i>Educational Statistics</i>	2
Elective	3
SPEECH 417 <i>METHODS OF TEACH-</i>	
<i>ING SPEECH AND DRAMATICS</i> .	3
*a) SPEECH 462 <i>GROUP DISCUS-</i>	
<i>SION & LEADERSHIP or</i>	3
l) SPEECH 412 <i>SPEECH DIAGNOSIS</i>	
<i>or SPEECH 411 Adv. SPEECH</i>	
<i>PATHOLOGY</i>	

16

<i>Spring Semester</i>	<i>S.H.</i>
Phys. Ed. 100B <i>Phys. Ed.</i>	
Activities	1/2
Soc. St. 100B <i>Dev. of World Civ. II</i>	3
Music 100 <i>Music Appreciation</i> ..	2
Sci. 100A <i>Physical Science or</i>	
Sci. 100B <i>Biological Science</i> .	4
Eng. 100C <i>Fund. of Writing</i>	3
SPEECH 105B <i>INTRO. TO</i>	
DRAMATIC PROD., B	2
SPEECH 104 <i>INTRO. TO</i>	
PHONETICS	3
	<hr/> 17 1/2

Phys. Ed. 200B <i>Phys. Ed.</i>	
Activities	1/2
Soc. St. 200B <i>Contemp. Am. Life, II</i>	3
Ed. 202 <i>Human Dev. &</i>	
<i>Behavior, II</i>	3
Elective	2
*a) SPEECH 438 <i>CREATIVE</i>	
<i>DRAMATICS or</i>	2
b) Ed. 473 <i>ELEM. SCHOOL LANG.</i>	
<i>ARTS</i>	
SPEECH 204 <i>INTRO. TO PUBLIC</i>	
<i>SPEAKING</i>	2
SPEECH 209 <i>SPEECH CORRECTION:</i>	
<i>THEORIES AND PRACTICES</i>	3
	<hr/> 15 1/2

Ed. 304X <i>Prins. & Methods of</i>	
<i>Teaching</i>	3
H.Ed. 100 <i>Healthful Living</i>	2
Eng. 100G <i>Western World</i>	
<i>Literature</i>	3
SPEECH 468 <i>MEASUREMENT OF</i>	
<i>HEARING</i>	3
SPEECH 457 <i>DIRECTING THE</i>	
<i>ASSEMBLY PROGRAM</i>	2
SPEECH 461B <i>PRACTICUM IN</i>	
<i>SPEECH CORR., II</i>	2
Elective	2
	<hr/> 17

Ed. 403 <i>STUDENT TEACHING IN</i>	
<i>SPEECH ARTS & SCIENCES</i>	8
Elective Math. or Science	2
Elective Humanities	2
*a) SPEECH 448 <i>CHORAL SPEAK-</i>	2
<i>ING or</i>	
b) SPEECH 469 <i>AUDITORY</i>	
<i>REHABILITATION</i>	
	<hr/> 14

SPEECH MAJOR

A specialization of 53 s.h. in Speech qualifies majors for a certificate in:
1) Teaching of Speech in Secondary Schools; 2) Teaching of the Speech Defective, Kindergarten through 12th grade.

*Each major must declare a nine point concentration in either: (a) Speech and Dramatics, or (b) Speech Correction, beyond the core of courses required of all speech majors (44+9 = 53 S.H.)

SPEECH MINOR

SOPHOMORE YEAR

	Fall Semester	S.H.	Spring Semester	S.H.
*Speech Arts elective (see below)	2		Speech 104 <i>Intro. to Phonetics</i> ..	3
			Speech 209 <i>Speech Correction: Theories and Practices</i>	3

JUNIOR YEAR

Speech 204 <i>Intro. to Pub. Spkg.</i> ..	2	Speech 106 <i>Intro. to Oral Interpretation</i> ..	2
Speech 461A <i>Practicum in Speech Correction, I</i>	2	*Speech elective (see below) ..	4

SENIOR YEAR

Speech 417 <i>Methods of Teaching Speech and Dramatics</i>	3	Total semester-hours required:	21
*Speech elective from among the following courses:			
Speech 105A <i>Intro. to Dramatic Prod., A</i>	2	Speech 457 <i>Directing the Assembly Program</i>	2
Speech 435 <i>Stagecraft</i>	2	Speech 448 <i>Choral Speaking</i> ..	2
Speech 456 <i>Play Direction</i>	2	Speech 461B <i>Practicum in Speech Correction, II</i>	2
Speech 462 <i>Group Discussion and Leadership</i>	3	Speech 438 <i>Creative Dramatics</i> ..	2
Speech 470 <i>Argumentation and Debate</i>	3	Speech 410 <i>Speech Pathology</i> (if offered in spring)	2
		Speech 105B <i>Intro. to Dramatic Prod., B</i>	2
		Speech 464 <i>Psychology of Oral Communication</i>	2

Sequences of Courses in Speech Minor

A. Required Sequences

Speech 100D during the freshman year or Speech 103 during the first half of the sophomore year—prerequisite to other speech courses.

Speech 104 and 209 before Speech 461A

B. Recommended Sequences

Speech 204 before Speech 449, Speech 462, Speech 470

Speech 105A and 105B before Speech 435 or 456

Transfer students should confer with the Chairman of the Speech Department regarding courses taken elsewhere which can be accepted as fulfilling any of the above requirements.

Recommended Sequence for Limited Specialization

Dramatics elective (see list above)	2
Speech 104 <i>Introduction to Phonetics</i>	3
Speech 209 <i>Speech Correction: Theories and Practices</i> ..	3
Speech 204 <i>Intro. to Public Speaking</i>	2

Total 10

THE DEPARTMENT OF GEOGRAPHY

Geography is a science. On a scientific basis it deals with places and their chief attributes, the topography, the rocks and minerals, the climate, the natural vegetation and animal life, the soils, and increasingly with the role of man, his culture, his works, his relationship to the earth.

The Department of Geography attempts not only to prepare teachers of geography for the junior and senior high schools, but also to: (1) contribute to the preparation of teachers of science and other subjects; (2) provide fundamental courses for the student of history, economics, and related subjects; (3) furnish a basis of study for enjoyment of recreation and travel; and (4) afford, as a part of general education, a broad cultural background for the understanding of our times.

General Education Course

SCI. 100C, *The Earth Sciences*, is required of all students.

The Geography Minor

The following course requirements constitute the geography minor:

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>S.H.</i>	<i>Spring Semester</i>	<i>S.H.</i>
Geog. 201 <i>Climatology</i>	3	Geog. 204 <i>Soils, Natural Vegetation, and Land Utilization</i> ...	3

JUNIOR YEAR

Two of the following:

Geog. 202 <i>Regional Geography of Anglo-America</i>	3	Geog. 302 <i>Economic Geography</i> .	3
Geog. 304 <i>Geography of Europe</i> ..	3		
Geog. 305 <i>Geography of Asia</i> ..	3		

SENIOR YEAR

One of the following:

Geog. 421 <i>Population Problems of the World</i>	3
Geog. 419 <i>Geography of the Soviet Union</i>	3

And

Geog. 401 <i>The Teaching of Geography in Secondary School</i> ..	3
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Total: 21 semester-hours

THE SECOND YEAR

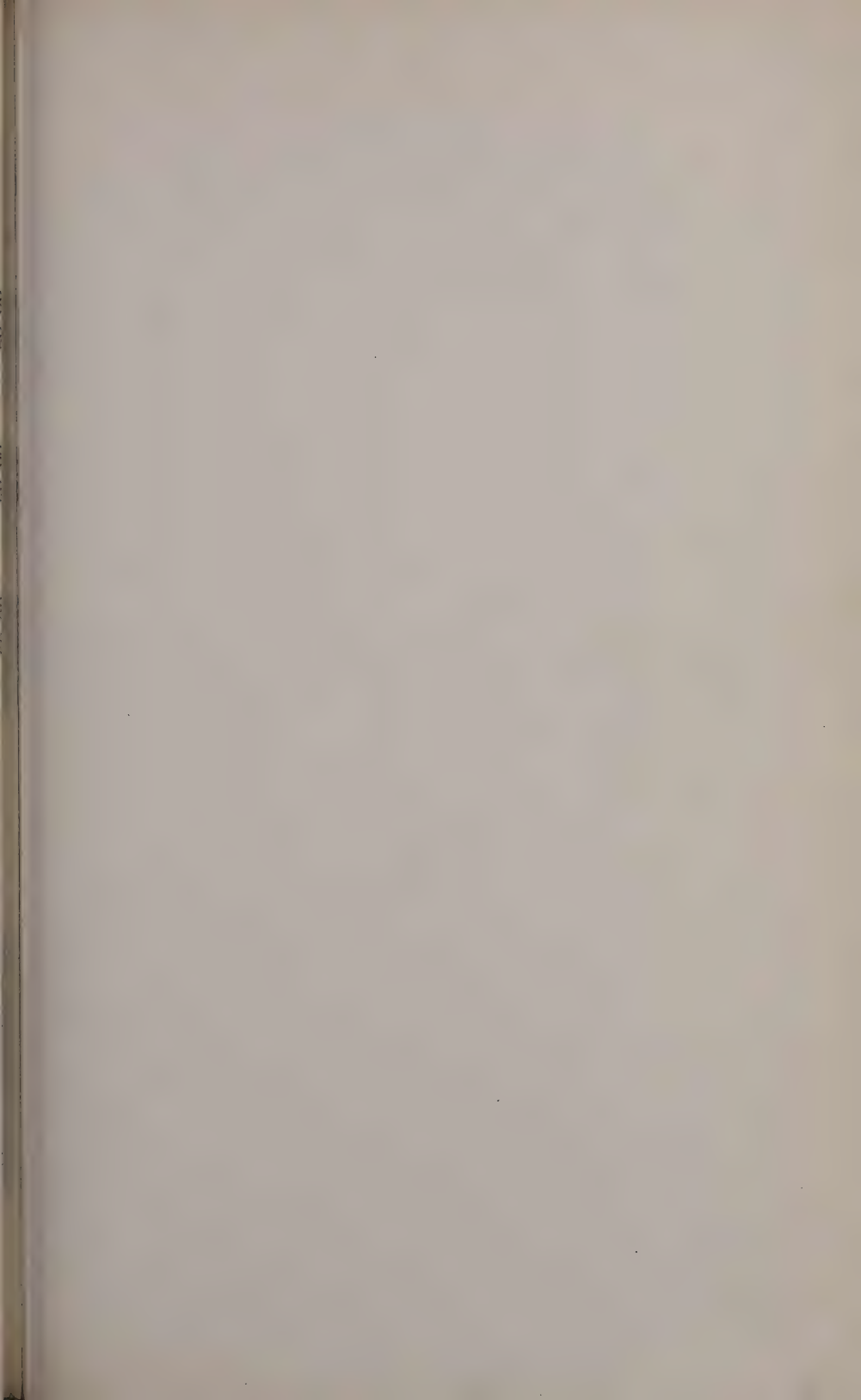
The courses for the sophomore year are arranged to give the students a thorough grounding in the physical background of the subject, and a development of geographic thinking that will aid them in clear reasoning and expression in working out the relationships of man to his natural environment.

THE THIRD AND FOURTH YEARS

In the work for the junior and senior years there is emphasis upon the subject-matter in regional and economic geography necessary for teaching geography in the secondary schools. Also more attention is given to the professionalization of the subject-matter than in either of the previous years; that is, the techniques of presenting material, the use of geographical tools, and the problems of testing are dealt with in the treatment of the subject-matter in hand.

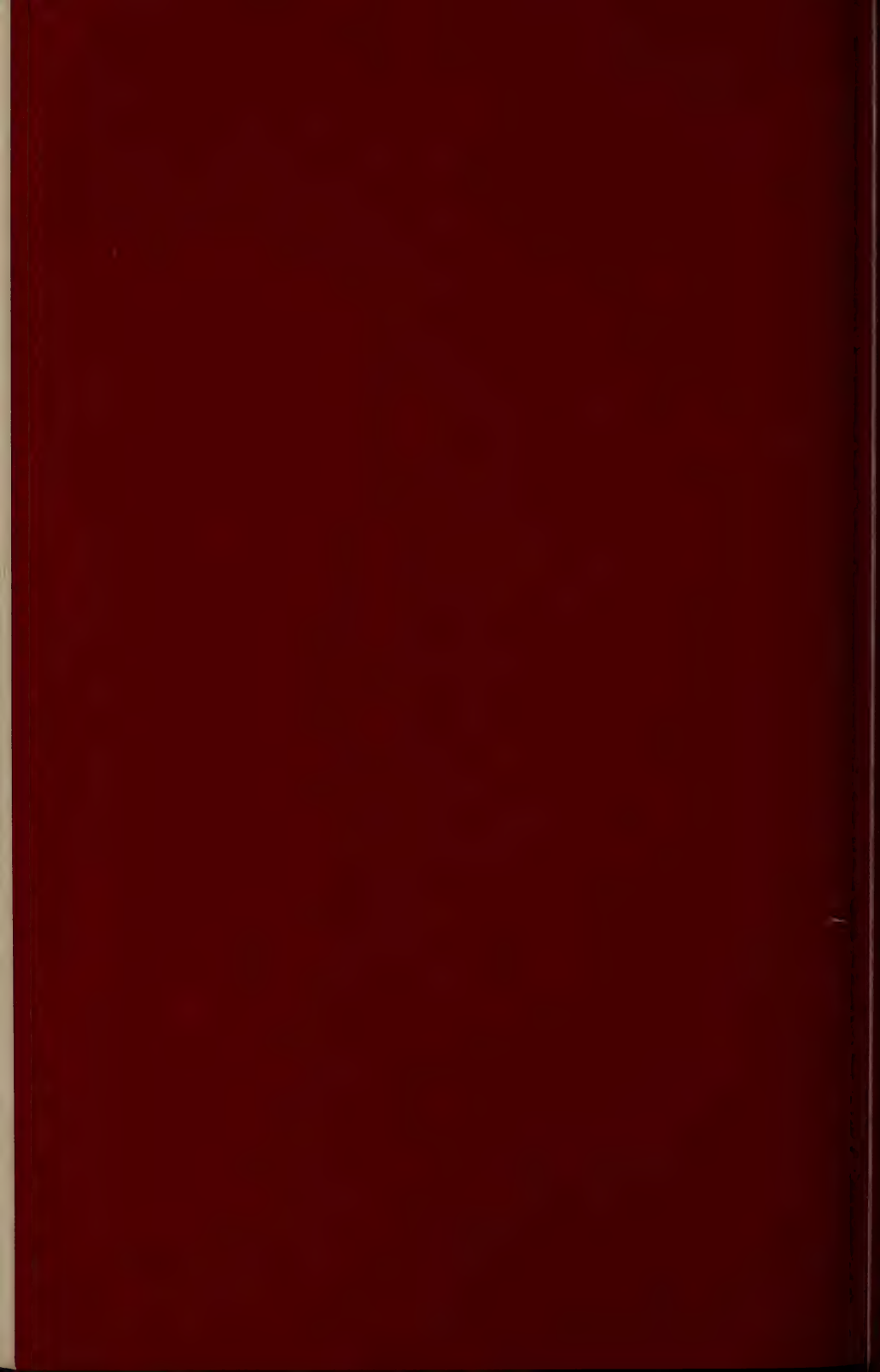
General expenses for the regular college year of approximately 38 weeks for New Jersey residents are:

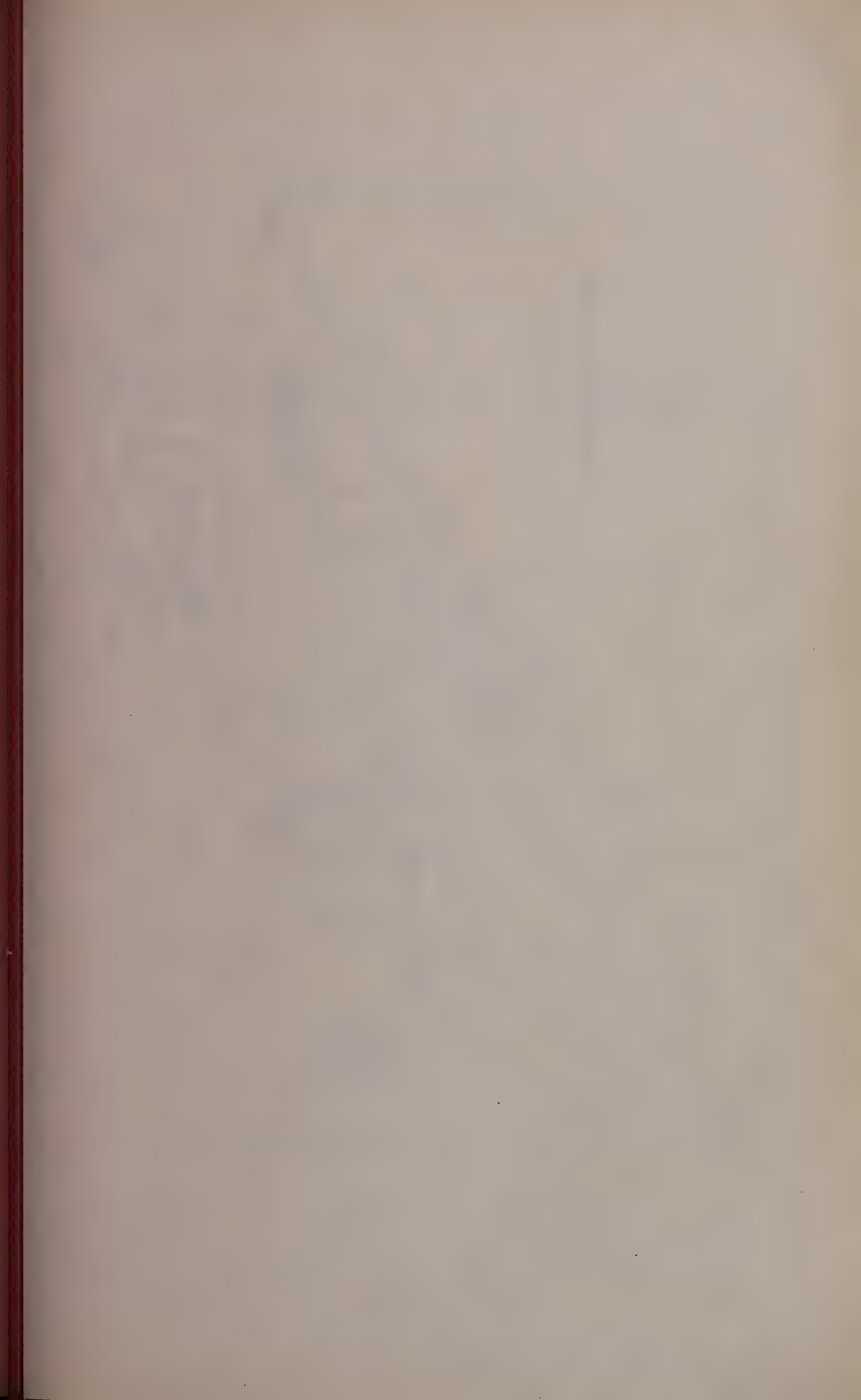
	STUDENTS RESIDING ON CAMPUS	STUDENTS RESIDING OFF CAMPUS	STUDENTS RESIDING AT HOME	STUDENT'S ESTIMATE OF COST
*Tuition.	\$ 150.00	\$ 150.00	\$ 150.00	\$ 150.00
*Registration Fee	4.00	4.00	4.00	4.00
*General Service Charge	32.00	32.00	32.00	32.00
*Student Teaching Fee	15.00	15.00	15.00	15.00
*Student Government Association Fee	46.00	46.00	46.00	46.00
Student Health and Accident Insurance (12 months coverage, not obligatory).	16.00	16.00	16.00	
Books, and Instructional Equipment (approximate)	75.00	75.00	75.00	
Board.	468.00	468.00	—	
Room (On Campus)	180.00	—	—	
Room (Off Campus—averages \$9 per week)	—	342.00	—	
Clothing (Minimum)	100.00	100.00	100.00	
Lunches at College	—	—	142.50	
Travel expenses.	76.00	76.00	—	
Travel expenses (Commuters based on a 30 mile average).	—	—	399.00	
Personal and recreation.	95.00	95.00	95.00	
Miscellaneous expenses	60.00	60.00	60.00	
TOTAL, APPROXIMATE, USD				



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MONTCLAIR STATE COLLEGE



BULLETIN

OF

Montclair State College

GRADUATE DIVISION

MONTCLAIR STATE COLLEGE

Upper Montclair

1962

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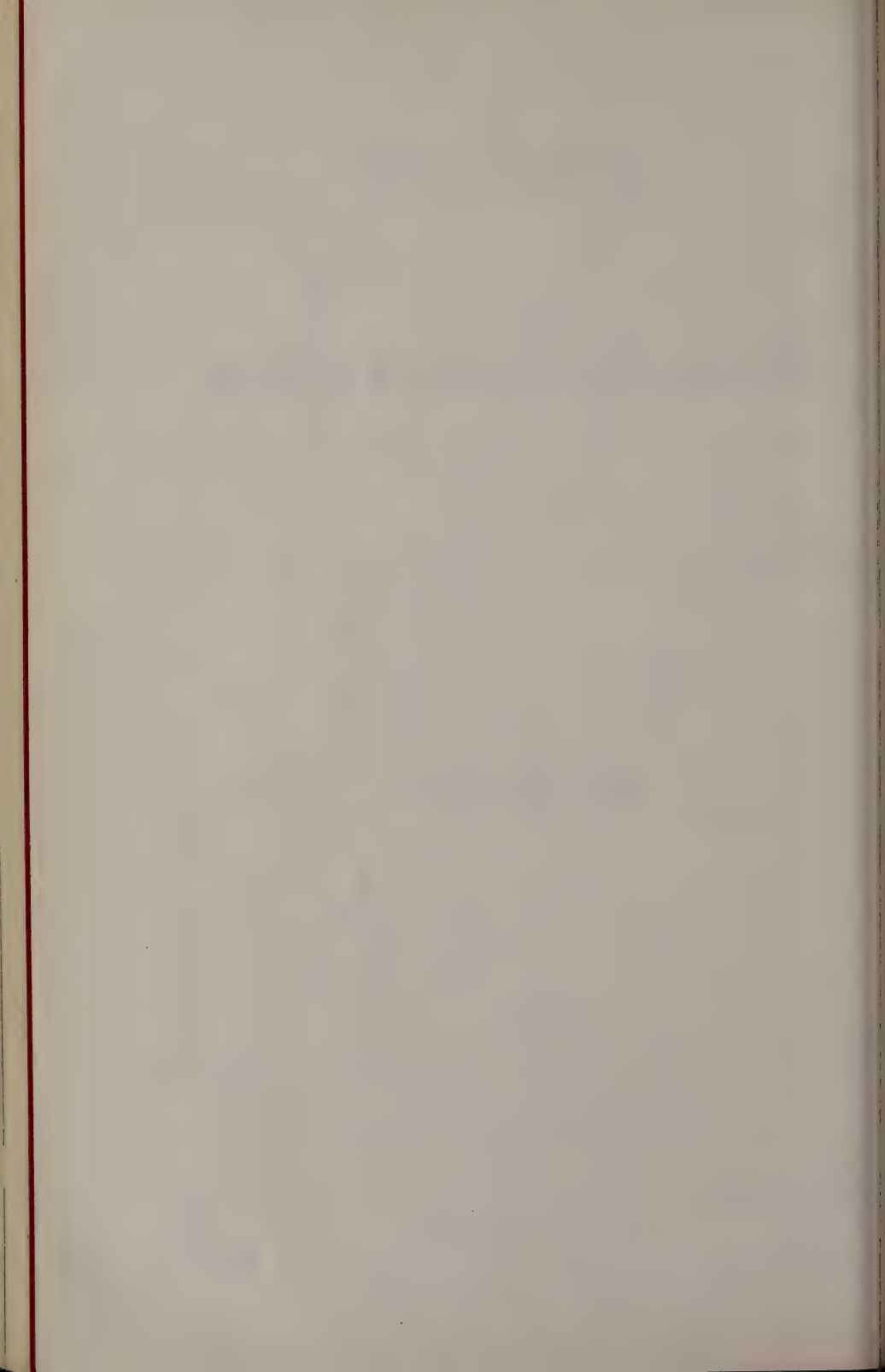
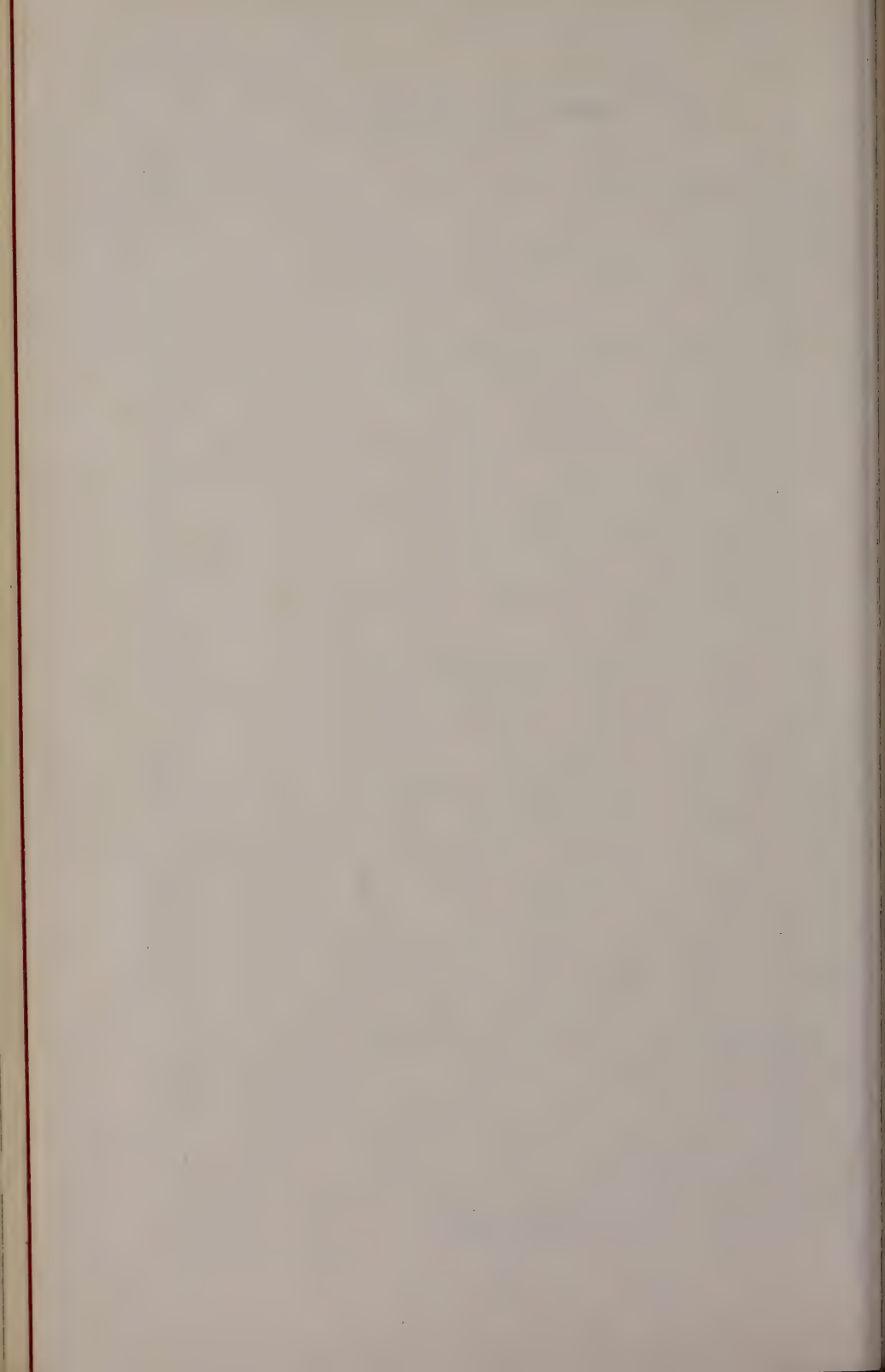


TABLE OF CONTENTS

Officers of Administration	Page 5
Graduate Faculty	6
GENERAL INFORMATION	9
History	9
Location	10
Professional and Academic Status	10
Library	10
Administration	11
Graduate Faculty	12
Purposes	12
Graduate Point of View	13
Master's Degree Programs	14
Admission and Matriculation	15
Certification	18
Requirements for A. M. Degree	19
Graduate Research	22
Program Policies	23
DEPARTMENT OF BUSINESS EDUCATION	27
DEPARTMENT OF EDUCATION	37
DEPARTMENT OF ENGLISH	65
DEPARTMENT OF FOREIGN LANGUAGES	79
DEPARTMENT OF INDUSTRIAL ARTS EDUCATION	84
DEPARTMENT OF MATHEMATICS	89
DEPARTMENT OF SCIENCE	100
DEPARTMENT OF SOCIAL STUDIES	117
DEPARTMENT OF SPEECH	137
OTHER COURSES THAT MAY BE USED AS ELECTIVES	153
Fine Arts	153
Geography	158
Music	163
Health Education	164
Physical Education	165
New Jersey State School of Conservation	167



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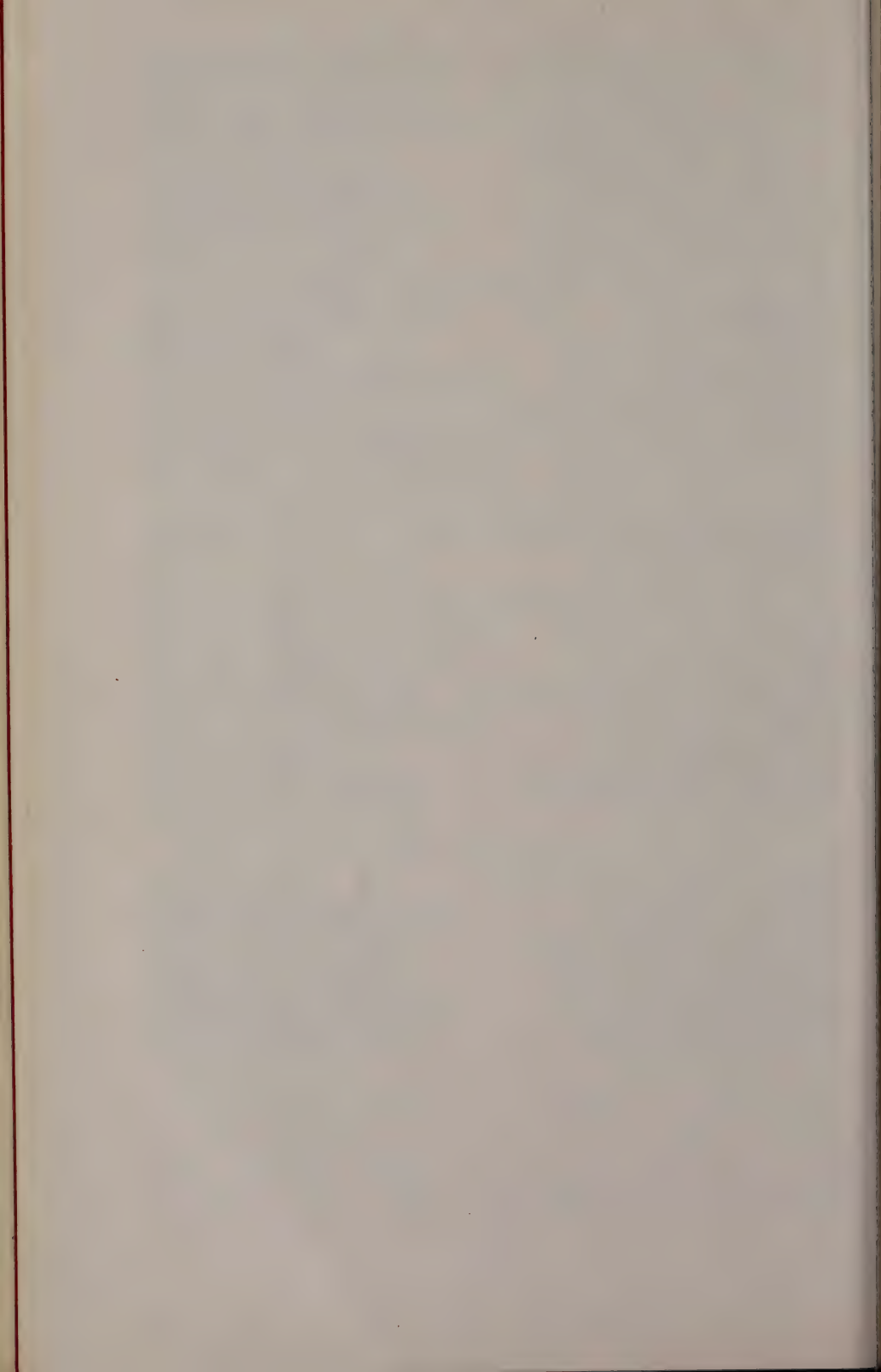
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GENERAL INFORMATION

HISTORY AND DEVELOPMENT OF THE GRADUATE DIVISION

In 1908 Montclair State College began its teacher-education program as a two-year normal school. In 1927, by action of the State Board of Education, it was changed to a State Teachers College with four-year curricula leading to a Bachelor of Arts degree and certification to teach in the secondary schools of the State. Extension courses were instituted in 1929, and summer sessions in 1930, to enable teachers who held only a diploma and a teacher's certificate to obtain a Bachelor's degree.

Subsequently, to permit teachers to continue their professional training and receive graduate credit for courses taken in accordance with organized programs of advanced work, the State Commissioner of Education, at the request of the College, recommended, and the State Board of Education authorized, in June, 1932, the establishment of appropriate graduate programs leading to the Master of Arts degree, which the College was empowered to grant. Graduate studies were first offered in the summer of 1932 and have been continued in all regular and summer sessions since that time.

In 1937, the Middle States Association reviewed and accredited the graduate program and has since done so regularly, as has the American Association of Colleges for Teacher Education, until this function was assumed by the National Council for the Accreditation of Teacher Education. In 1948, the Graduate Committee was formed as a sub-committee of the Administrative Council to co-ordinate the graduate work of the various departments participating in it and to establish policies and standards appropriate to Master's degree programs. Since 1956, this Committee, under the title of Graduate Council, assumed greater responsibility for the conduct of graduate work.

On July 1, 1958, by action of the State Board of Education, the name of the College was changed to Montclair State College. Its function, however, continues to be that of a professional school devoted primarily to serving the interests of secondary education in this State.

The last decade has witnessed a rapid but orderly expansion of the entire College. The construction of additional modern physical facilities, the development of a graduate faculty as an identifiable entity, and the establishment of new and appropriate degree programs, have kept pace with both the increasing graduate student enrollment and the educational needs of New Jersey.

Currently there are more than 1,500 students registered in the various courses of this division, with approximately 800 students

matriculated in ten different academic programs leading to the Master of Arts degree.

LOCATION

Situated on the northern boundary of Upper Montclair, the College is approximately three miles north of the center of the town of Montclair and twelve miles west of New York City. The main entrance is at the intersection of Valley Road and Normal Avenue. Public transportation is available on the Greenwood Lake Division of the Erie-Lackawanna Railroad and on Public Service bus routes (Nos. 60 and 76 connect with the Erie-Lackawanna Railroad in the town of Montclair). Other bus lines serve the campus from New York, Newark, the Oranges, and Paterson. The junction of Highways Nos. 46 and 3 is located about one mile north of the campus. The Garden State Parkway connects with these highways close to the College.

PROFESSIONAL AND ACADEMIC STATUS OF THE COLLEGE

Accreditation and Memberships

Montclair State College is a fully accredited member of the Middle States Association of Colleges and Secondary Schools. In addition, the National Council for the Accreditation of Teacher Education has granted it full accreditation for the preparation of elementary and secondary school teachers, and school service personnel, with the Master's degree as the highest degree approved. Credits are exchangeable among colleges and universities which are members of regional and national associations to the extent to which the degree requirements of individual institutions permit the acceptance of transfer credit.

The College holds memberships in the American Association of Colleges for Teacher Education, the American Council on Education, The Association of State Colleges and Universities and the New Jersey Association of Colleges and Universities. Graduates of the College are accepted for membership in the American Association of University Women.

THE COLLEGE LIBRARY

Conveniently located on the main floor of College Hall is the College Library of 80,000 volumes, with two large reading and reference rooms and three smaller reading rooms housing the Music Collection and the Curriculum Laboratory and Textbook Exhibit. The Textbook Exhibit of over 5,000 volumes includes the most recent textbooks in all subjects on both the elementary and secondary

levels and curricula from the majority of communities and counties of New Jersey, as well as outstanding curricula from other states. Some of the Library's special collections include the Webster Memorial Collection of Modern Poetry, a collection which contains many first editions and autographed copies; a group of early science textbooks; the Hatch collection of Lincoliana; the Finley Memorial Science Library which consists of especially selected books in the field of natural history; a special group of books about the State of New Jersey; and the Alumni Memorial Library containing fine editions of books which have been presented to the Library by members of the Alumni Association. This collection is housed in the Alumni Lounge. Of special interest is the China Institute Library, a permanent loan from the China Institute of New Jersey. The Library maintains a complete file of bulletins of the U. S. Office of Education for which this library is designated as an official depository library in the area. The Library is also a depository for the U. S. Census Reports. An up-to-date and widely-used file of pamphlets, maps and pictures, is available to all students.

Most of the books, including the reference collection, are on open shelves. This open-shelf policy applies also to the periodical collection which consists of back issues of over 300 currently received periodicals. Bound volumes of magazines total over 2,500.

Supplementing the College Library is the library of the College High School which is a large, pleasant room housing 4,500 volumes and located in the College High School. The High School librarian works in close cooperation with the members of the College Library staff, particularly in the field of literature for adolescents, in which an extensive and up-to-date collection is maintained.

It is expected that the new Harry B. Sprague Library will be completed in 1963. This building will accommodate 215,000 book volumes, will have a total student seating capacity of 800, and will be completely air-conditioned.

THE ADMINISTRATION OF THE MASTER'S DEGREE PROGRAMS

In the organization of the College, the administrative unit which is responsible for the proper functioning of Master's degree curricula is the Graduate Council. Its membership consists of those administrative officials of the College who are ex-officio closely associated with graduate studies, together with others who represent the various departments offering Master's degree programs. Departmental representatives on the Council are appointed by the President of the College, upon the recommendation of a committee of graduate faculty members whose chairman is the Dean of the College.

The Council's chief function is to develop the basic standards, policies, and procedures which govern the granting of Master's

degrees, to approve new programs, and to engage in a continuous evaluation of all Master's degree work.

Graduate program policies and procedures are put into effect and coordinated by the Chairman of the Graduate Council in cooperation with the various Master's degree program advisors and the Dean of the College, who supervises the activities of the Graduate Division and is responsible to the President of the College. All programs, policies, and procedures are subject to approval by the State Board of Education.

GRADUATE FACULTY

Faculty staff serving the Graduate Division are with few exceptions members of the full-time staff of the College. Those who have attained the rank of associate professor or higher, or have an earned doctorate, are eligible for appointment to the graduate faculty. In addition to those with such evidence of scholarship, a limited number of experienced teachers who have demonstrated excellence in classroom instruction are assigned to teach graduate classes. On occasion, highly competent specialists whose contributions would strengthen and enrich the customary course offerings are invited to supplement the regular faculty by giving courses in their particular areas of professional competence and experience. While the graduate faculty is an identifiable entity its members are not restricted to advanced instruction. Graduate courses taught constitute only a part of the regular schedule of those participating in this program. By distributing the teaching assignments among many of the faculty qualified for graduate courses, it is possible to provide a richer sequence of advanced studies than if the graduate course offerings were limited to specific areas in which the College could maintain full-time graduate specialists.

PURPOSES OF GRADUATE STUDY

Montclair State College continues to be a professional school devoted primarily to the interests of secondary education. This objective is the controlling factor in the development of the curricula, teaching procedures, extra-curricular activities, and college spirit. The major goal of all its courses is the development of the competence of the teacher as a professional person.

The Master of Arts degree program is planned to meet the increasing needs of school systems for educational personnel with advanced proficiency and leadership ability. For this reason graduate courses of study provide the varying patterns of advanced work appropriate in those areas of specialization for which Master's degree curricula have been developed.

Graduate courses are organized to serve the interests of two specific groups of students:

- Group I Those who wish to matriculate for the degree of Master of Arts: graduates of accredited liberal arts and professional colleges, secondary school teachers, supervisors, principals, and other school administrators, all of whom must be graduates of approved colleges.
- Group II Those who do not wish to matriculate for the degree: students who hold graduate degrees, but who wish to continue their professional preparation; college graduates who wish to take courses leading toward secondary school certification; students who are matriculated for advanced degrees in other colleges and universities and who plan to transfer their credits; special students taking courses for cultural purposes without reference to credit.

THE GRADUATE POINT OF VIEW

While many of the attributes, objectives, and curricula of the undergraduate major programs are reflected in the philosophy of the curricula leading to the Master's degree, its administrative patterns, attitudes, and services extend upward and are of a progressively advanced character. Therefore, in its operational framework, graduate work consists of a logically integrated program of advanced, specialized courses based on an undergraduate major and/or other adequate background.

Because of its very nature, graduate work calls for the highest performance on the part of the student with ability, perseverance, and scholarly interests. It is expected that each individual will supply the continuing motivation essential to attain the professional growth which is the ultimate aim of advanced study in teacher education.

The objective in each of the Master degree curricula is to develop a greater degree of professional competence in the basic subject matter of the major or area of specialization, knowledge of the current literature relating to it, and a feeling of confidence on the part of the student in his own ability to use and interpret the results of the reported investigations of others.

The various degree programs also provide the background and auxiliary tools needed for study in depth of a given area. Through the basic research courses, seminars, term papers, research reports, and special problem courses, or in the preparation of a thesis, the student finds in disciplined investigation the essential opportunities for satisfy-

ing individual curiosity and the development of personal and professional growth.

There is also in each program a chance for the scholar to enrich his general education through appropriate elective experiences which will provide breadth of study. While basically the advanced work of a teacher should be such as to increase his classroom effectiveness, it should also help him to continue to grow as a person of learning as well as a person of skills.

Finally, the classroom climate and course organization should be such as to encourage responsible individual initiative, extensive reading, problem solving inquisitiveness, and creative thinking, which are the means to professional academic maturity. Each student should consider himself as a co-worker with other students, scholars, and teachers in a cooperative intellectual endeavor on a high level.

MASTER'S DEGREE MAJOR AREAS

It has been the policy of the College administration to limit its Master's degree commitments to those areas in which its staff and facilities permit it consistently to offer work of high quality. Majors in graduate work are offered in the fields of Administration and Supervision, Business Education, English, Industrial Arts, Mathematics, Personnel and Guidance, Science, Social Studies, and Speech. There is also a program in Foreign Languages involving study abroad, which is limited to Montclair State College graduates.

MASTER'S DEGREE PROGRAM PATTERNS

The curriculum pattern for each of the Master's degree programs includes experiences in four areas: 1) professional education, 2) subject matter specialization, 3) research, and 4) general education electives.

1. *Basic Professional Education*

A limited portion of the graduate program is assigned to education courses which will permit the student to continue exploration of philosophical, psychological, sociological, and historical phases of his professional training in advanced courses in this area.

2. *Area of Concentration*

The main emphasis in the graduate study program of each student will be devoted to increasing the student's knowledge and competence in his field of specialization.

3. *Research*

Since it is important that each graduate scholar should have experience in the systematic acquisition, organization, and

analysis of information relative to some problem or study in his field of specialization, opportunities are provided for a basic course in the techniques and procedures of research, as well as in the student's area of specialization through course work, research seminars, and thesis writing.

4. *General Education Electives*

Opportunities are provided in this category to undertake several broadening intellectual experiences which will extend the student's study outside of his specialty and into other areas in the academic disciplines.

In the selection of the electives, students are cautioned about a choice of highly specialized single-purpose technical and professional skill courses. While such studies may constitute graduate work, and are appropriate for certain Master's degree programs in the area of specialization, they do not in general serve the purpose of the general education electives, which is to contribute to the individual's cultural development.

For those with a strong foundation in the liberal arts, the credits in the elective group might be used to strengthen their competence in a second area of certification, or in a discipline related to the major area.

Within this framework a definite program of course possibilities should be worked out to meet the special needs of the individual and the requirements of each department. This will permit a sequence of studies which will complement his previous education so that his resources of skill and knowledge are properly balanced, and he is given the most advanced work for which he is qualified.

Thus, enlightened and responsible program-planning in the development of each student's plan of graduate study requires informed and consistent guidance.

ADMISSION AND MATRICULATION FOR THE MASTER'S DEGREE

1. The applicant for admission to any of the Master's degree programs should be a graduate of an accredited college or university and must present evidence of his qualifications for advanced study as shown by a high scholastic record, professional teacher-education training, and experience.

Each department may require an applicant with a doubtful undergraduate record or a bachelor's degree from a non-accredited institution to take qualifying examinations, such as the Graduate Record Examination or any other suitable test it may consider necessary, to determine a student's acceptability for matriculation in the Master's degree program of that department.

2. Actual matriculation (i.e., formal and official acceptance in writing by the Graduate Office in a program leading to the Master's degree) may be deferred by the student for good reason until no more than eight semester hours of graduate credit have been earned. However, in the student's own interest it is strongly recommended that he determine his eligibility for matriculation before initiating a program of graduate study. In so doing he will receive guidance and counsel, thereby avoiding the disappointment which may occur when non-matriculated students pursue work of their own selection.
3. Prior to admission and matriculation, each student indicates the Master's degree area in which he will complete such courses as are prescribed. Upon formal acceptance a work program is made out in conference with a departmental advisor appointed for this purpose.
4. To be eligible for matriculation in a major subject area, a student must present evidence, in the form of an official undergraduate transcript, of a strong background of courses in the chosen area of specialization or major field. The minimum amount of work in the undergraduate major required for acceptance varies from 18 to 24 semester hours, or more for certain of the highly specialized majors, in accordance with the entrance requirements established for each of the various Master's degree programs. These requirements are indicated in the departmental statements describing the various programs.
5. Since the College is a professional teacher-training institution and its Master's degree curricula in the subject matter areas are designed to contribute to the increased effectiveness of the classroom teacher, applicants for matriculation in these programs should be certified to teach the subjects of the major in the chosen area in the State of New Jersey. Applicants who are not so certified should study the information relating to certification and the Master's degree on pages 18 and 19.
6. To be eligible for matriculation in the several professional education programs in the Department of Education, it is required that a student be certified to teach in New Jersey and also to have acquired some successful teaching experience. Two full years of experience are required for acceptance in the program in Administration and Supervision, and one full year for Personnel and Guidance.

Steps in the matriculation process

1. The applicant secures an application form in the Graduate Office which must be completed and returned to that office

together with a check or money order for the required application fee.

2. The applicant will have his college send official transcripts of all college credits (if the applicant is not a graduate of Montclair) to the Chairman of the Graduate Council. The completed application, application fee, and the official transcripts should be on file in the Graduate Office at least one month before the time of registration for graduate courses.
3. After the application and transcripts have been received and a careful preliminary review of the student's undergraduate record and other qualifications have been made in the Graduate Office, the applicant will be invited to confer with the Chairman of the Graduate Council and/or a tentative recommendation will be made as to what action should be taken on the application.
4. The applicant will next confer with the graduate advisor in the department in which he expects to do his work, and if, or when, he is eligible for matriculation the advisor will develop a formal program of courses with him.
5. A final conference with the Chairman of the Graduate Council may be arranged, if necessary. Following this, the applicant will be advised in writing of the decision of the Graduate Council and will be furnished with a statement of the course of study (official Work Program) to be completed within a six-year period.
6. Final action on all applicants is vested in the Graduate Council. For good reason legitimate adjustments may be made at any time in the student's original program, with the approval of his program advisor and confirmation of this action by the Chairman of the Graduate Council. (Amendments of this nature take place on an appropriate form available in the Graduate Office.)
7. As part of the application for matriculation, the student will present to the Graduate Office for his file, a personal statement of his objectives, academic interests, experiences, and any other special matters which will assist those who must assess his readiness for a particular program of graduate work and develop his course of study for the Master's degree.

Types of admission in the degree programs

1. Regular admission for applicants eligible to be fully matriculated.
2. Conditional (granted because specific undergraduate course deficiencies exist).

3. Probational (granted for one summer or semester, to determine a student's scholastic ability).
4. Senior-Graduate (granted only to Montclair State College seniors).

Senior students currently enrolled in the College who have good academic records and who are within sixteen semester hours of graduation may be permitted to take a maximum of eight semester hours of graduate work concurrently with any remaining semester hours to meet the requirements of their A.B. degree and prior to graduation. Such students must have written permission from the chairman of the department concerned, the Dean of the College, and the Chairman of the Graduate Council, and must register for this special work in the office of the Director of Field Services. (To determine his eligibility to receive this permission the student should obtain the appropriate application form from the Registrar's office, which when properly filled out will permit him to have his request considered.) No graduate credit will be given retroactively for work taken in excess of degree requirements.

CERTIFICATION STUDENTS

Students holding bachelor's degrees from other colleges and desiring secondary certification to teach in New Jersey should submit a complete transcript of undergraduate and graduate work to the Secretary of the State Board of Examiners, Office of Teacher Certification, State Department of Education, 175 West State Street, Trenton 25, New Jersey, and request an evaluation so as to determine the subject matter or professional courses that may be lacking for certification in some major area or areas of specialization. New Jersey residents may secure this information from the Superintendent of Schools of the County in which they reside.

Once they have received this evaluation they will be in a position to confer with the Certification Officer of the College, who will assist them in selecting courses offered at the College which will meet certification requirements.

CERTIFICATION STUDENTS AND THE MASTER'S DEGREE

Students holding bachelor's degrees from other colleges must be fully certified to teach in the area of their major specialization by the time the degree is conferred. Students should have completed their supervised student teaching or have had one year of successful teaching experience under provisional certification before they can matriculate for the Master's degree.

Those who lack some of the required preparation for full limited secondary certification, or certification in either professional or special

subjects for both elementary and secondary schools, may need to register for certain undergraduate courses in the 200 and 300 series, which courses will not carry graduate credit. However, if the required professional certification courses are taken in logical sequence, some of them in the 400 series, or above, may be counted toward the limited certificate as well as toward the Master's degree. Students who are interested in correlating their work for certification with some work toward the Master's degree should arrange an advisement interview with the College Certification Officer to determine the possibilities whereby certain courses available might serve these combined purposes.

CERTIFICATION STUDENTS AND STUDENT TEACHING

Graduates of other colleges who wish to do their student teaching through Montclair State College should obtain a statement from the Director of Student Teaching and Placement outlining the conditions under which it can be done. This group will be expected to meet the standards established for Montclair State College students before being assigned for student teaching.

Students who desire to meet the State requirement in supervised student teaching must be approved by the Director of Student Teaching, after which approval they will register for this course in the office of the Director of Field Services. Supervised student teaching does not carry credit toward the Master's degree.

PROCEDURE FOR THE ADMISSION OF VETERANS

A prospective student with the special classification of a veteran should determine his admission status with the Graduate Office before making application for a Certificate of Eligibility for matriculation.

REQUIREMENTS FOR THE MASTER OF ARTS DEGREE

1. A minimum of thirty-two semester hours of graduate credit is required in all departments. Additional hours may be added to compensate for any deficiencies found in the applicant's undergraduate record.
2. Each major department requires a minimum of at least eighteen semester hours of graduate work in the area of specialization.
3. No less than six semester hours of the required total of thirty-two semester hours must consist of professional education courses in the Department of Education.
One two-semester hour course in this group, Education 503, *Methods and Instruments of Research*, is required of all

students matriculated in the Graduate Division and must be taken in residence.

4. To be certain that all Master's degree students will have a reasonable amount of knowledge and experience related to the important area of research, each candidate (matriculated after August 31, 1959) must complete Education 603, *Principles and Practices of Research* for two semester hours, or an equivalent research seminar in the department of his major subject. Education 503, *Methods and Instruments of Research*, is a prerequisite for this required research.
5. An average grade of "B" or better is required for work submitted for the Master's degree. No graduate credit is given for work below "C".
6. The majority of the courses taken or credits earned should be on the 500-600 level.
7. Work for the Master's degree must be completed within six years after the date of matriculation. If an extension of time is required, a request for such extension must be filed with the Chairman of the Graduate Council. The student's progress will then be reviewed and evaluated in accordance with the requirements for the degree as stated in the most recent Graduate Catalog and with the established policy for this type of reinstatement.
8. A comprehensive departmental examination or its equivalent is required in all departments so designed as to constitute the means whereby all the facets of the student's work may be brought to a focus at the end and an assessment made of the extent to which he has achieved his objectives.
This examination may be written and/or oral. The oral phase of the examination will be on an individual basis. The examination is given at least one month before graduation time by the department in which the student does his major work. (The time at which these examinations are scheduled is announced in the Graduate Division's Spring Semester calendar, and on the Graduate Office bulletin board, or the student may ascertain the information by telephoning the Graduate Office. Responsibility to obtain this information is placed upon the student.)
9. Four of the total credits can be satisfied by a thesis which meets the approval of the Graduate Council. In some departments the thesis may be offered in place of the written comprehensive examination. The oral examination may or may

not be required if a thesis is presented in lieu of the written examination.

10. *Residence requirements*

- a. A minimum of thirty-two semester hours of graduate work in residence is required except as noted in item 11.
- b. The student must attend the College as a full-time graduate student for at least one summer session (six semester hours), or one regular semester, to meet this residence requirement.

Fully employed teachers are encouraged to restrict the graduate work carried during the year, and to take advantage of the course offerings in the summer session when their normal professional responsibilities will not interfere with the study expected of advanced students.

11. *Transfer credit*

With the approval of the student's program advisor and the Chairman of the Graduate Council, a graduate of one of the New Jersey State Colleges or the State University may request the transfer of appropriate graduate credits earned. Candidates who are graduates of an accredited college or university other than one of the New Jersey State Colleges, or the State University, and who have matriculated on or after April 12, 1962, may have transfer of appropriate graduate credits earned in a graduate program of an accredited college or university on approval of the Graduate Council. The maximum amount of credit which may be accepted is eight semester hours. The usual procedure is to arrange in advance for this privilege, and to make application for acceptance on a form available in the Graduate Office.

12. *Certification evidence*

To receive final approval by the Registrar as a candidate for the degree, the student must have evidence in his official file to indicate that he has met the certification requirements for the program for which he was matriculated. This evidence may consist of either a photostat of the essential certificate to teach, or a letter of eligibility.

13. *Application for Conferment of the Degree and Attendance at Commencement*

Candidates must file with the Registrar an application for conferment of the degree before November 30 of the college year in which the work is to be completed. Application blanks for this purpose may be secured from the Registrar. The

burden of responsibility for the request rests with the candidate. This is of special significance to the teacher-in-service who may have distributed his graduate work over four or five years.

The student should note that attendance is required at commencement, unless permission for graduation in absentia is granted by the President of the College.

GRADUATE RESEARCH AND THE MASTER'S THESIS

Nature and purpose

Although Master's degree programs may differ considerably in content, in every type some substantial experience in the scholar's approach to the acquisition, preparation, analysis, and interpretation of information is indispensable. The courses and research seminars providing the opportunities for these experiences will introduce the student to research methods in the several disciplines and indicate what and where are the basic sources of information. This will require him to engage in a survey of the professional literature of his major through the development of an approved research investigation. The study may involve either the solution of a complex problem, or it may consist of a series of scholarly reports.

To accomplish this, an advanced research study, essay, or research report is required in all the Master's degree programs by means of the departments' research seminars, for which the basic research methods course, Education 503, provides the prerequisite foundation.

Creative work, or distinguished performance involving intellectual as well as technical mastery, may be substituted in the programs in the arts, music, literature, etc. The essential element in this type of experience is independent work in depth by the student, whatever its form. Whether or not it is carried out in connection with courses is immaterial if the investigation conducted under faculty supervision requires the student to work independently on his own and to demonstrate his capacity to find, assess, organize, treat, and interpret his materials in a scholarly manner.

As the basic style and guide for research reports, investigations, and theses, the Graduate Council has adopted William G. Campbell's *Form and Style in Thesis Writing*. It may be purchased at the College Bookstore.

The Master's Thesis

In addition to the two graduate courses required for the research experiences (Education 503, *Methods and Instruments of Research* followed by the Departmental research seminars), an additional research experience is provided for the exceptional student to write a Master's thesis.

The writing of a Master's thesis is optional. Only those students who have done scholarly work and have given evidence of research ability will be permitted to develop a thesis.

To encourage scholarly students to develop a thesis, a department may accept it as equivalent to the required research seminar, and in lieu of all or part of the final comprehensive examination. Students writing a thesis must receive the approval of their departmental advisor and the Chairman of the Graduate Council, and must register for the course, Graduate 600, *Master's Thesis*, for four semester hours. Information which will aid students submitting a Master's thesis is available in mimeographed form and may be obtained in the Graduate Office.

Students are expected to complete the thesis within one calendar year. An extension of time may be granted by the Chairman of the Graduate Council after consultation with the student's advisor. If granted, the student must re-register for Graduate 600 on a no-credit basis and pay a fee for two semester hours. This extension will be for six calendar months.

INFORMATION RELATIVE TO THE IMPLEMENTATION OF PROGRAM POLICIES

1. *Explanation of the Course Numbering System*

a. *Eligibility for enrollment*

Courses in the 500 and 600 series are open only to graduate students. Those in the 400-499 series and listed in this catalog may be selected by graduate students for graduate credit. When the courses in this series are given for certification and/or the Master's degree programs, they will be open only to those advanced senior-undergraduates with a high scholastic average who receive the written approval of the Dean of the College. (A special form provided for this must be obtained from the Registrar's office.)

Any student, to be eligible for a course, must have completed the logical and sequential prerequisites for it, as well as any specific prerequisites indicated in the course description.

b. *Master's degree credit*

Students registering in graduate credit courses for which they are eligible must understand that in order for such courses to be counted toward a Master's degree, they must conform to the general requirements of a particular degree curriculum, and be in accordance with the official work program. It is most important, therefore, that at each registration

period the student bring with him his copy of the work program, together with his transcripts of graduate work taken at this College so that, with the guidance of the departmental advisor, his course selections from the scheduled offerings will be the most appropriate for meeting his objectives.

c. *Special restrictions for graduate program credit*

1. No credit is granted toward the Master's degree for courses with a grade below "C," or for courses taken more than ten years previously, or for certain specifically designated basic courses on the 400 level which are required for initial certification.
2. No more than eight semester hours of graduate credit taken prior to matriculation, or more than six semester hours of graduate credit in extension (off-campus courses) may be credited toward the Master's degree.
3. No graduate credit is granted retroactively for work taken in excess of undergraduate degree requirements.
4. No graduate credit is allowed for concurrent registration (enrollment) in other colleges without the knowledge and approval of the Chairman of the Graduate Council.
5. No graduate credit is granted for courses in which a student, who has been an auditor, eventually chooses to satisfy the credit requirement for the course, except as approved under change of registration procedures.
6. Since some course numbers have been changed, as indicated in the Graduate Catalog, no course previously taken under one number may receive credit under its new number. The responsibility for avoiding this duplication is placed upon the student.
7. Any course taken by a student as an undergraduate may not be taken again and counted toward the Master's degree, even though the course and the credits associated with it were not required for the Bachelor's degree.

2. *Rating system*

Marks indicating degrees of achievement in the various courses are given in letters A, B, C, D, and F.

A—Excellent

B—Good

C—Fair

D—Poor (No "D" credit may be counted toward the Master's degree.)

F—Failure

Inc.—Incomplete work*
 WP—Withdrawn, passing
 WF—Withdrawn, failing

3. *Retention standard*

The Chairman of the Graduate Council and the student's program advisor may, for good reason, revoke the matriculated status of any one who is found to lack the qualifications of personality, integrity, temperament, emotional adjustment, or physical stamina, or after it has been established that there is evidence of serious unprofessional conduct.

A student who does not maintain an acceptable standard of scholarship (an average of "B" or better) will be placed on probation. If, while he is on probation, his scholarship in courses approved by his advisor does not show marked improvement or if it becomes apparent that he is unlikely to achieve an acceptable standard, he will lose his status as a matriculated student.

4. *Student load*

Graduate work should involve careful and intensive study with ample time to explore areas which may warrant further study. Twelve to sixteen hours of work per semester is considered a full-time program for the graduate student in residence.

For teachers, or others employed full time, six semester hours of work in any one semester shall be the maximum load, with four semester hours being recommended.

In the regular six-week summer session, the maximum load shall be eight semester hours. However, the Graduate Council strongly recommends that the student consider six semester hours of work a full program.

5. *Enrollment regulations and procedures*

Fees and Service Charges

Thirteen dollars (\$13.00) per semester hour to residents of New Jersey and those non-residents who teach in New Jersey public schools.

Fifteen dollars (\$15.00) per semester hour to non-residents of New Jersey who do not teach in New Jersey public schools.

Registration fee two dollars (\$2.00)

Service charge fifty cents (\$.50) per semester hour

Late registration fee five dollars (\$5.00)

Supervised student teaching (if required) .. seventy-eight dollars (\$78.00)

* Where a student has had an unavoidable absence, or presents other good reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester or summer session. This mark must be removed by a final grade within eight weeks, or the course cannot be credited and the mark becomes "F" automatically.

Application for matriculation fee five dollars (\$5.00)
Dormitory fees including room, breakfast, and dinner for a
summer session, eighteen dollars (\$18.00) a week.

These charges are subject to revision.

All charges are payable during the registration period.

6. *Change of schedule or program*

No student will be permitted to change his scheduled courses without the approval of his advisor and the Director of Field Services. *The deadline for making changes is the last day of the late registration period.* To change from "auditor" to "credit," or vice versa, a student must make formal application not later than the mid-point in the semester. Forms are available in the Graduate Office.

7. *Withdrawal from a course*

A *written notice* filed in the office of the Director of Field Services is required. (Refunds are computed from the date of receipt of such written notice.) Students who do not submit a written notice will receive the mark of "F" in those courses which they cease to attend. Non-attendance at classes or oral or written notification to the instructor does *not* constitute a formal withdrawal.

Students who withdraw after the mid-point in the semester will receive an automatic grade of "F," except in certain very exceptional cases that receive approval.

8. *Information as to course offerings and scheduling*

Regular bulletins are published for the information of those who wish to attend part-time, extension, or summer session courses. These contain a list of course-offerings, time of class meetings, room assignments, and instructors for the scheduled classes. Other information may be obtained from the Director of Field Services, Montclair State College, Upper Montclair, New Jersey.

9. *Programs, regulations, and procedures are subject to change*

The College administration must continuously adapt graduate curricula, rules, course-offerings, and procedures, to meet the changing needs and conditions associated with the special problems incidental to graduate work.

A conscientious and continuous effort will be made to keep students informed of all important changes in the policies or procedures of the Graduate Division; and when basic adjustments are made, the administration of these will be such as to make the transition as satisfactory as possible.

However, each student is given the responsibility of keeping himself informed of the present status of the graduate program and his progress toward the Master of Arts degree.

DEPARTMENT OF BUSINESS EDUCATION

The graduate work in the Department of Business Education is designed to prepare teachers of business education for administrative, supervisory, specialized work or master teaching in the field of business education. In order to attain these objectives the candidate has an opportunity to supplement his undergraduate program and to explore advanced areas of work in accordance with his individual background, experience, achievement, and professional needs.

Graduate work toward the Master of Arts degree in Business Education presupposes the completion of an undergraduate major in business education, or its equivalent. The undergraduate major is based on the requirements as established by the New Jersey State Board of Education. For further details see the Undergraduate Bulletin.

In lieu of four of the thirty-two semester-hours of credit required for the Master of Arts degree, the candidate may write a thesis giving the results of some research in the field of business education or its teaching. This research may be made only after consultation with the Chairman of the Business Education Department. Plans should be made to have the thesis in its final form and approved by the Department of Business Education by May 1st of the year in which the degree is expected to be conferred.

All candidates for the Master of Arts degree in Business Education must pass a comprehensive examination before they are granted the degree. This examination is given early in April and late in July for those candidates anticipating graduation. It is general in nature and is intended to test the candidate's maturity of thought with respect to business education.

GRADUATE PROGRAM OF STUDIES

MASTER OF ARTS DEGREE IN BUSINESS EDUCATION

Division I. Required Education Department Courses (6 s. h. required)

Ed. 503.	Methods and Instruments of Research	2 s. h.
Ed. 509.	Basic Educational Concepts	2 s. h.
Elective	To be chosen on recommendation and approval of the Chairman of the Department of Business Education	2 s. h.

Division II. Research Seminar, Field Work and Thesis (8 to 10 s. h.)

B. E. 501A.	Research Seminar in Business Education	2 s. h.
B. E. 501B.	Evaluation of Current Literature in Business Education	2 s. h.
Graduate 600.	Thesis*	4 s. h.
B. E. 532.	Field Studies and Audio-Visual Aids in Business Education	4 s. h.
	or	
B. E. 533.	Supervised Work Experience and Seminar	4 s. h.

*Division III. Required Business Professional Courses**Group A—(4 s. h. required)*

B. E. 502.	Principles and Problems of Business Education	2 s. h.
B. E. 503.	The Business Education Curriculum	2 s. h.
B. E. 504.	Administration and Supervision of Business Education	2 s. h.
B. E. 505.	Tests and Measurements in Business Education	2 s. h.

Group B—(4 s. h. required)

B. E. 520.	Improvement of Instruction in Business Education	
Part A.	General Business Subjects	2 s. h.
Part B.	Bookkeeping, Accounting, and Business Arithmetic	2 s. h.
Part C.	Secretarial Subjects	2 s. h.
Any part may be elected separately. A minimum of two parts must be completed.		

Division IV. Elective Subject-Matter Courses

(8 to 10 s. h. required—dependent on the total accumulated in Division II—to be selected after consultation with the Chairman of the Department of Business Education.)

* Students writing a thesis will take B. E. 501A and will substitute four (4) semester-hours for the thesis in place of B. E. 501B. This will count as a total of six (6) semester-hours in research and thesis.

THE GRADUATE COURSES

BUSINESS EDUCATION 501A AND B. *Research Seminar in Business Education-Evaluation of Current Literature*

This course deals with research and literature in the field of business education. The emphasis is placed on making the classroom teacher an intelligent consumer of the current research findings and publications related to business education.

Prerequisite: EDUCATION 503

Credit: 4 semester-hours

BUSINESS EDUCATION 502. *Principles and Problems of Business Education*

The purpose of this course is to survey the basic principles and practices of business education. Among the topics considered are: history of the high school business program, purposes, attitudes of management and labor toward education, the relationship of general education to business education, and trends in the field. This course should be scheduled early in the graduate program.

Credit: 2 semester-hours

BUSINESS EDUCATION 503. *The Business Education Curriculum*

This course is a sequel to BUSINESS EDUCATION 502. It deals with the curricula in business education for various levels and types of schools. In this course, the student learns how to evaluate present programs and to make recommendations for needed changes.

Prerequisite: BUSINESS EDUCATION 502

Credit: 2 semester-hours

BUSINESS EDUCATION 540. *Administration and Supervision of Business Education*

This course offers an opportunity to study the problems of organizing, directing, and supervising business education programs. Such matters as the functions of the administrator and supervisor of business education, textbook selection, teacher selection, testing programs, conferences, and equipment and layout are considered. It is a valuable course for prospective administrators.

Credit: 2 semester-hours

BUSINESS EDUCATION 505. *Tests and Measurements in Business Education*

This course deals with constructing, administering, interpreting, and evaluating all types of testing materials in business subjects.

Credit: 2 semester-hours

BUSINESS EDUCATION 516. *Business Organization and Management Problems*

The problems approach is used in this advanced course in considering such topics as business ownership, finances, location and layouts, purchasing, personnel, and managerial controls.

Credit: 2 semester-hours

BUSINESS EDUCATION 518. *Advertising Media*

This course in advertising offers an opportunity to study in some detail the uses of various advertising media such as newspapers, magazines, radio, television, and direct mail, and to evaluate their effectiveness in terms of campaigns.

Credit: 2 semester-hours

BUSINESS EDUCATION 520A, B, C. *Improvement of Instruction in Business Education*

These courses give the experienced business teacher an opportunity to study the content, methods, teaching aids, and evaluation procedures in at least two* of the three specialized fields:

BUSINESS EDUCATION 520A.* *General Business Subjects*

Credit: 2 semester-hours

BUSINESS EDUCATION 520B.* *Bookkeeping, Accounting, and Business Arithmetic*

Credit: 2 semester-hours

BUSINESS EDUCATION 520C.* *Secretarial Subjects*

Credit: 2 semester-hours

Prerequisite: Teaching experience in the field of business education

Note: A minimum of two (2) parts of BUSINESS EDUCATION 520 must be completed.

BUSINESS EDUCATION 532. *Field Studies and Audio-Visual Aids in Business Education*

This course gives the classroom teacher an opportunity to visit and evaluate some of the practices of many business offices, industries, and retailing organizations located in the metropolitan area. It also provides for a study of the many audio and visual aids available for use in business classes.

Credit: 4 semester-hours

BUSINESS EDUCATION 533. *Supervised Work Experience and Seminar*

The graduate student who has not had extensive business experience has an opportunity to work full-time for six weeks during the summer in a business position under College supervision. An evening conference is held weekly to discuss problems related to the work experience program.

Credit: 4 semester-hours

BUSINESS EDUCATION 540. *Auditing*

This course seeks to develop the meaning and techniques of auditing procedure. It includes practice in the fundamental mechanics of auditing as well as in the making of the formal report on an audit.

Prerequisite: 8 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 542A. *Advanced Business Law Cases I*

This course presupposes a knowledge of the basic principles of business law. It is designed to furnish a broader understanding and background in areas requiring considerable training to be effective in the classroom. Cases are concerned with the topics of contracts, negotiable instruments, and insurance.

Credit: 2 semester-hours

BUSINESS EDUCATION 542B. *Advanced Business Law Cases II*

This advanced law course is a continuation of BUSINESS EDUCATION 542A, but course 542A is not a prerequisite. A basic knowledge of the principles of law is, however, required. The course includes a further study of law cases pertaining to bailments, carriers, sales, property, landlord and tenant, torts, and business crimes.

Credit: 2 semester-hours

BUSINESS EDUCATION 543A. *Advanced Accounting I*

The content of this course emphasizes an intensive study of the items making up accounting statements and the principles of evaluation and income determination. Problem solving is an integral part of the course. At least eight semester-hours of accounting are required as a prerequisite.

Credit: 2 semester-hours

BUSINESS EDUCATION 543B. *Advanced Accounting II*

This course is a continuation of BUSINESS EDUCATION 543A, but course 543A is not a prerequisite. Topics treated include consignments, agency and branch accounting, consolidations, receivership accounting, estate and trust accounting. At least eight semester-hours of accounting are required as a prerequisite.

Credit: 2 semester-hours

BUSINESS EDUCATION 544A, B, C, D. *Workshops in Secretarial and Clerical Practice, Advanced Stenography, Typewriting, Office Machines*

These workshops which may run simultaneously provide an opportunity for the study, planning, and development of teaching materials and projects fitted to the particular situation in which the person is teaching. Instruction is on an individual and small-group basis with occasional seminar meetings of the entire group.

Prerequisite: Teaching experience in the field

Credit: 2 semester-hours each

SENIOR GRADUATE COURSES

The following courses are not required for the Master's degree in Business Education. With the approval of the Chairman of the Department, they may be used as elective credits.

BUSINESS EDUCATION 403. *Advanced Dictation and Transcription, II*

This course is designed for the teacher of stenography and transcription who wishes to study the problems of dictation and transcription from the viewpoint of his own class situation and also to improve his skill.

Those who take this course should have had a methods course in stenography and have had at least student-teaching experience.

Credit: 2 semester-hours

BUSINESS EDUCATION 404. *Business Economics*

This course deals with the business aspects of economics as related to immediate and long-range problems; operation and government control of public utilities; taxation, government finance, and labor and management problems.

Credit: 2 semester-hours

BUSINESS EDUCATION 405. *Office Practice—Clerical*

Actual training is given on the 10-key and full keyboard adding listing machines, the rotary and key-driven calculating machines, and the posting machine. Other office skills necessary for the clerical worker are stressed. Limited instruction is provided on the voice-writing and duplicating equipment.

Techniques of job analysis, including job description, job breakdown, and job evaluation are practiced. Supervised work experience is a requirement of this course.

Credit: 3 semester-hours

BUSINESS EDUCATION 406. *Advertising, Principles and Practices*

This course aims to acquaint the student with the social and economic aspects of advertising so that a fair evaluation may be made of its worth as well as its undesirable aspects. Copy appeals, the writing of copy, advertising layouts, and the selection of appropriate

types of media for various advertisements are considered. Emphasis is placed on the research aspects of the subject so important today.

Credit: 2 semester-hours

BUSINESS EDUCATION 407. *Office Practice—Secretarial*

This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied, with considerable attention being paid to filing. Understanding of office procedures and stenographic skill are strengthened through supervised office assignments and class work projects. Supervised work experience is a requirement of this course.

Credit: 3 semester-hours

BUSINESS EDUCATION 408. *Business Finance*

This course deals with the process involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stock, borrowed capital, mortgages, bonds, and notes are solved.

Credit: 3 semester-hours

BUSINESS EDUCATION 409. *Consumer Education*

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and the development of intelligent techniques for buying and using consumer goods and services.

Credit: 3 semester-hours

BUSINESS EDUCATION 410. *Advanced Accounting*

This is an advanced course for students who have had two years of accounting. Emphasis is placed on techniques of problem solving. Included are problems relating to basic accounting principles, cost accounting, and intermediate accounting. Considered are the determination of net income on accrual, cash and installment bases; problems of valuation including problems of depreciation, depletion, and amortization; consignments; preparation and analysis of financial statements, including analysis of net change in gross profit and net change in working capital; partnership formation, operation, dissolu-

tion, and liquidation; bankruptcy, reorganization, and recapitalization and consolidated balance sheets and income statements.

Prerequisites: BUSINESS EDUCATION 201, BUSINESS EDUCATION 202, BUSINESS EDUCATION 301, AND BUSINESS EDUCATION 302

Credit: 3 semester-hours

BUSINESS EDUCATION 411. *Tax Accounting*

The purpose of this course is to give a comprehensive picture of the Federal Tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in individual tax returns are studied.

Prerequisite: 12 semester-hours of accounting

Credit: 2 semester-hours

BUSINESS EDUCATION 412. *Project Development in Consumer Education*

This course permits the students to explore in a specialized fashion two major areas of consumer education. Two projects are developed, one on housing and the other on the furnishings of a home. The basic purposes of this course are to illustrate the handling of material and the procedures that might be used in developing other consumer education units.

Prerequisite: A course in consumer education or economics

Credit: 2 semester-hours

BUSINESS EDUCATION 414. *Merchandising, I*

This course analyzes the problems of how, what, where and when to buy; terms of purchasing, tested receiving and marketing procedures; mathematics of merchandising—setting retail price, planning mark-up and mark-down; and inventory controls. It is designed to assist the teacher of the prospective or actual small businessman.

Credit: 2 semester-hours

BUSINESS EDUCATION 417. *Marketing*

The functions involved in the marketing process, the various channels of distribution, marketing institutions, and the costs of marketing are considered in this course. Such topics as auctions,

produce exchanges, wholesalers, retailing, department and mail-order stores, chain stores, cooperatives, profits and prices are included.

Credit: 2 semester-hours

BUSINESS EDUCATION 418. *Retail Store Management*

The work of the store manager in retail store operation is fully explored. The problems of organization and management as encountered in various types of retail stores are discussed. Consideration is given to trends, principles, and practices in small and large stores in both the independent and chain-store fields.

Credit: 2 semester-hours

BUSINESS EDUCATION 420. *Field Studies in Business Education*

This orientation course aims to introduce business-education students, through direct observational techniques, to the realities of the business world. Field trips are made in the New York Metropolitan Area which include visits to business organizations where the following types of business activity or relationships may be observed: production, merchandising and advertising; finance, transportation and communication; employer-employee relationships; government and business relationships. The field trips are supplemented by regular class sessions where seminar discussions are held and visual aids developed and used for the business education field.

Credit: 2 semester-hours

BUSINESS EDUCATION 421. *Finance and Investments for Families*

This course applies the principles of budgeting, banking, insurance, finance, and investments to the complicated problems facing individuals and families in these areas. It deals with budgets; savings; banking; life insurance; general insurance annuities; pensions; wills; such investments as stocks, bonds, and mutual funds; homes; and small business enterprises. This course is not open to students who have completed BUSINESS EDUCATION 409 unless they obtain special permission.

Credit: 2 semester-hours

DEPARTMENT OF EDUCATION

Graduate courses in this department meet one or more of three needs: (1) instruction in the Administration and Supervision major leading to the A.M. degree and New Jersey certification for one or more of the positions of Subject Supervisor, General Secondary Supervisor, and Secondary School Principal; (2) instruction in the Personnel and Guidance major leading to the A.M. degree and New Jersey certification in guidance; and (3) advanced professional instruction for administrators, supervisors, counselors, and classroom teachers.

In pursuit of the above objectives most graduate courses in the Education Department are designed for students with teaching experience. Other graduate courses presuppose at least a teaching certificate.

Graduate students who do not hold teaching certificates will enroll in undergraduate and senior-graduate (400 level) courses in order to meet certification requirements. Under special and unusual circumstances, uncertificated graduate students may also enroll, with the approval of the Chairman of the Education Department, in the following graduate courses in the Education Department: 500, 502, 505, 506, 507, 535, 560, 562.

Graduate students working toward an A.M. degree in Administration and Supervision are required to have at least two years of teaching experience before matriculation; those majoring in Personnel and Guidance are required to have at least one year of teaching experience before matriculation.

Students who plan to remain classroom teachers are not encouraged to seek an A.M. degree in either Administration and Supervision or Personnel and Guidance.

Courses in the teaching of elementary-school subjects are open only to regular Montclair State College undergraduates or to holders of the A.B. degree from the Montclair State College.

I. COURSE REQUIREMENTS FOR THE A.M. DEGREE IN ADMINISTRATION AND SUPERVISION

- A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience completed prior to matriculation. Not more than eight semester-hours of work taken prior to matriculation may be counted toward this degree.
- B. Graduates of New Jersey State Colleges and Rutgers, The State University, may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Program Adviser and the Chairman of the Graduate Council.

Graduates of other accredited colleges and universities may have this privilege if matriculated on or after April 12, 1962.

- C. Satisfactory completion of not fewer than thirty-two semester-hours of work as follows: (In exceptional cases appropriate substitutions or changes may be made in these requirements upon approval by the Program Adviser.)

1. Required Courses—20 semester-hours

S. H.

Ed. 503. <i>Methods and Instruments of Research</i>	2
Ed. 510. <i>Introduction to Educational Administration</i>	2
Ed. 512. <i>School-Community Relations</i>	2
Ed. 514. <i>School Law</i>	2
or	
Ed. 516. <i>School Finance</i>	
Ed. 520. <i>Organization and Administration of the Modern H. S.</i>	2
Ed. 530. <i>Curriculum Construction in the Secondary School</i>	2
Ed. 535. <i>Organization and Administration of Extra-Curricular Activities</i>	2
Ed. 540. <i>Supervision in the Secondary School I</i>	2
Ed. 580. <i>Principles and Techniques of Guidance</i>	2
Ed. 603. <i>Principles and Practices of Research</i>	2

2. Education Department Electives (6 semester-hours)

The student, with his adviser's approval, will select six semester-hours in additional Education Department courses.

3. Electives in Other Departments (6 semester-hours)

The student, with his adviser's approval, will select six semester-hours of course work in other departments. It is intended that the electives chosen shall be of a liberal-cultural orientation selected to broaden the student's interests and background.

4. Candidates for the Master's degree in Administration and Supervision will be required to pass a comprehensive examination.

II. COURSE REQUIREMENTS FOR THE A.M. DEGREE IN PERSONNEL AND GUIDANCE

- A. Graduation from an accredited college or university, a New Jersey teacher's certificate, and two years of teaching experience. One year of this experience must be completed prior to matriculation. (Not more than eight semester-hours will be counted toward this degree prior to the obtaining of this certificate and the beginning of this experience.)

- B. Satisfactory completion of not fewer than 32 semester-hours as follows:

1. Basic Requirements

S. H.

Ed. 503. <i>Methods and Instruments of Research</i>	2
Ed. 567. <i>Educational and Psychological Measurements in Guidance</i>	2
Ed. 580. <i>Principles and Techniques of Guidance</i>	2

2. Select 4 s. h. from the following

Ed. 560. <i>Advanced Educational Psychology</i>	2
Ed. 561. <i>Child and Adolescent Development</i>	2
Ed. 562. <i>Principles of Mental Hygiene</i>	2
Ed. 564. <i>Psychology and Education of Exceptional Children</i> —Physical and Mental	2
Ed. 565. <i>Psychology and Education of Exceptional Children</i> —Social and Emotional	2
Ed. 566. <i>Psychology and Education of the Gifted</i>	2
Ed. 568. <i>Psychological Tests in Guidance Programs</i>	2
3. Select 10 s. h. from the following (Ed. 580 is a prerequisite for all of the following.)

Ed. 581. <i>Community Resources for Guidance</i>	2
Ed. 582. <i>Vocational Guidance</i>	2
Ed. 583. <i>Educational Guidance</i>	2
Ed. 584. <i>Social-Moral Guidance</i>	2
Ed. 585. <i>Group Guidance and Counseling Activities</i>	2
Ed. 586. <i>Elementary School Guidance Services</i>	2
Ed. 587. <i>Administration and Supervision of Guidance Programs</i>	2
Ed. 588. <i>Techniques of Interviewing and Counseling</i>	2
Ed. 589. <i>Student Personnel Services in Higher Education</i>	2
4. Select 4 s. h. from the following

Ed. 601D. <i>Workshop in Education—Guidance</i>	2-4
Ed. 604. <i>Field Work in Guidance</i>	2-4
Ed. 606. <i>Practicum in Guidance Services</i>	2-4
5. Free electives in any department of the college 8
6. Candidates for the Master's degree are required to pass a comprehensive examination or complete Ed. 603, *Principles and Practices of Research*. The credits earned in Ed. 603 will be included in area 5 above.
7. A candidate may choose to write a thesis providing he receives the approval of his adviser. Four semester-hours' credit will be granted for the completion of a thesis and the credits will be included in area 5 above.

Note: Deviation from the above program will be permitted only by permission in writing countersigned by the Chairman of the Graduate Committee and the student's Program Adviser.

Special Note: Math. 400 (*Educational Statistics*) or equivalent, is a prerequisite to Ed. 503 and does not bear graduate credit.

Graduates from New Jersey State Colleges and the State University may transfer not more than eight semester-hours of graduate work to be counted toward this degree upon approval by the Chairman of the Graduate Council. Graduates of other accredited colleges and universities may have this privilege if matriculated on or after April 12, 1962.

GRADUATE COURSES

NOTE: Previous course numbers are enclosed in parentheses. Students are not permitted to enroll in courses they have taken previously under other titles and/or other course numbers.

EDUCATION 500 (500C). *Recent Trends in Secondary School Methods*

This course emphasizes the fundamental principles underlying the technique of teaching on the secondary school level. Some of the topics considered are: organization of knowledge, the logical and psychological aspects of method, developing appreciations, social-moral education, teaching motor control, fixing motor responses, books and verbalism, meeting individual differences, guidance in study, tests and examinations, marks and marking.

Credit: 2 semester-hours

EDUCATION 501. *Tests and Measurements in Secondary Education*

The purpose of this course is to develop an appreciation of the meaning and importance of measurement in education, and to give a working knowledge of instruments of measurement.

Credit: 2 semester-hours

EDUCATION 502(553). *Teaching the Block of Time Curriculum in the Junior and Senior High School*

This course concerns the structure, organization and methods of teaching block of time curriculums in secondary schools, after a discussion of underlying philosophy and historical development.

Credit: 2 semester-hours

EDUCATION 503. *Methods and Instruments of Research*

This course is required of all regularly matriculated candidates for the Master's degree without regard to their field of major interest. Its purpose is to introduce students of education to research and its practical application to professional problems. The course treats: the nature and types of educational research; methods and techniques of educational research; and the tools used in interpreting statistical data. During the course, the student completes his outline and may complete his research either in this course, in EDUCATION 603, or in

his departmental seminar or research course. It is recommended that this course be taken rather early in the graduate program and must precede work in departmental seminar or research courses.

Prerequisite: MATHEMATICS 400, or equivalent

Credit: 2 semester-hours

EDUCATION 504(540). *Recreational and Activity Leadership*

It is the aim of the course to furnish each student with practical skills that are of service in dealing with young people of high school age. The practical side is supplemented by a thorough consideration of source material and theory. A partial list of the areas covered in the course follows: How to organize and handle groups, the use of leaders from within the group, indoor games, outdoor games, special hikes, outdoor cooking, camp-fire leadership. Special field trips are provided to observe camps and playgrounds in operation.

Credit: 2 semester-hours

EDUCATION 505(552). *The Two-Year College*

This course is designed to acquaint the student with the history, purposes, patterns, and trends of the two-year college, including the junior college, the community college, and university extension centers.

Credit: 2 semester-hours

EDUCATION 506 and 507. *Teaching in the Two-Year College: Part I and Part II*

These courses are designed to examine the instructional problems in public two-year colleges as they are affected by: the student population, the curriculum functions, the organization of the program, and the guidance responsibilities of the teacher. Field study visits to nearby two-year colleges are required.

Prerequisite: EDUCATION 505

Credit: 2 semester-hours each

EDUCATION 508. *Organization and Administration of the Public Two-Year College*

This course deals with the organization and internal administrative structure of the various types of public two-year colleges. Topics considered include: purposes of the two-year college, district organi-

zation, finance, the college board of trustees, relationships of the college president to the board and the district, functions and duties of the various college administrative officers, and the faculty's role in administration.

Credit: 2 semester-hours

EDUCATION 509(500A). *Basic Educational Concepts*

This course deals with a study of those concepts or principles which have gradually emerged from the mass of educational theory, practice, and research to a point where they have been generally validated and accepted. Such a study is intended as a summarization aimed at achieving a better perspective of the relationship of specific items to the total educational pattern.

Prerequisite: EDUCATION 510

Credit: 2 semester-hours

EDUCATION 510(500D). *Introduction to Educational Administration*

This is the basic course in the organization and administration of the American school system at the national, state, intermediate, and local levels. The purposes and nature of school administration are studied. Other topics surveyed include: the superintendency, personnel problems, records and reports, plant administration, business administration, auxiliary services, administration of curriculum, instruction, guidance, and pupil personnel.

Credit: 2 semester-hours

EDUCATION 511. *School Business Administration*

Topics considered in this course include: the role of business administration in public education, office management, budgetary procedures, financial accounting, payroll administration, purchase and supply problems, insurance, debt service management, transportation, and food service.

Prerequisite: EDUCATION 510 or equivalent

Credit: 2 semester-hours

EDUCATION 512(500F). *School Community Relations*

This course concerns the relation of the school to other educational efforts of the community. It considers the scope and types of agencies and informal influences of an educational nature, and also the agencies and methods by which the best total cooperative effort can be attained.

It deals also with methods and plans of publicity. Constant reference throughout is made to New Jersey localities.

Prerequisite: EDUCATION 510 or equivalent

Credit: 2 semester-hours

EDUCATION 514(506). *School Law*

After an introductory general study of such topics as: legal theory, the separation of school government from other local government, the appellate function of the State Commissioner of Education and the State Board of Education, the course is concerned principally with a study of New Jersey school laws (Title 18 of the Revised Statutes) and decisions. Students who have taken EDUCATION 500E, *School Administration II: Law and Finance*, for credit are not permitted to take either EDUCATION 514 or EDUCATION 516.

Credit: 2 semester-hours

EDUCATION 516(507). *School Finance*

After an introductory unit concerned with the current economic environment, this course is devoted to a study of state and local taxation, state school-aid theory and practice, school-district indebtedness, cost-quality relationships, Federal aid, fiscal controls, and the budgetary process. Students who have taken EDUCATION 500E, *School Administration II: Law and Finance*, for credit are not permitted to take either EDUCATION 514 or EDUCATION 516.

Prerequisite: EDUCATION 510 or equivalent

Credit: 2 semester-hours

EDUCATION 519. *Seminar in Educational Administration*

This is an advanced course, taught by the case and other methods in which complex problems of education are considered.

Prerequisites: EDUCATION 510, 512, 520, 540, 580, and permission of the instructor

Credit: 2 semester-hours

EDUCATION 520(502). *Organization and Administration of the Modern High School*

The following topics are considered: the student personnel, building and revising the high school curriculum, providing for individual

differences, making the school schedule, records, the guidance program, pupil participation in government, the extra-curricular program, the health program, the safety program, discipline, library and study hall, cafeteria, the principal's office, and evaluating results.

Prerequisite: EDUCATION 510 or equivalent

Credit: 2 semester-hours

EDUCATION 525(509). *Secondary School Building Planning*

This course deals with the education planning of secondary-school buildings. The preparation of educational specifications and space requirements is considered. Topics considered include the planning of offices, classrooms, auditoriums, gymnasiums, laboratories, shops, libraries, cafeterias, and other spaces.

Prerequisites: EDUCATION 520 and EDUCATION 530 or equivalents

Credit: 2 semester-hours

EDUCATION 529(510). *Seminar in Secondary School Administration and Supervision*

In this course the class makes an intensive study of administrative and supervisory problems suggested by the educational events and trends of the year, by the interests and responsibilities of the members of the class, and by educational movements in New Jersey and the country. Each student does an individual piece of research which he reports to the class. This represents advanced work which depends upon previous study or experience in educational administration or supervision.

Prerequisites: EDUCATION 503, 520 and 540 or equivalents

Credit: 2 semester-hours

EDUCATION 530(504A). *Curriculum Construction in the Secondary School*

The purpose of this course is to consider the extent to which the secondary school curriculum meets the needs of a changing civilization, and to consider effective means of curriculum construction.

Prerequisite: EDUCATION 510 or equivalent

Credit: 2 semester-hours

EDUCATION 535(505). *Organization and Administration of Extra-Curricular Activities*

The first part of this course considers such general problems of extra-curricular activities as: their growing importance; their relation to the curriculum; the principles underlying their organization, administration, and supervision; and methods of financing. In the second part, an intensive study is made of the home room, the assembly, the student council, clubs, athletics, school publications, and other activities in which the class is especially interested.

Credit: 2 semester-hours

EDUCATION 538(548). *Curriculum Construction in the Elementary School*

This course offers an opportunity to review state and city elementary curricula: to discuss the principles of curriculum construction; to collect new teaching materials for the various subjects; and to evaluate, organize, and grade these materials. Teaching procedures in the use of materials are discussed and evaluated in terms of pupil needs, the objectives set up, and the results obtained. This course offers an opportunity to make a special study of the materials and procedures to be used in the supervision of the language arts.

Credit: 2 semester-hours

EDUCATION 539(504B). *Seminar in Curriculum Organization*

This course is for students actively engaged in problems of curriculum reconstruction and those who are anticipating committee work in this field. It concerns both the elementary and secondary levels. This represents advanced work which depends on previous study in the curriculum area.

Prerequisite: EDUCATION 503, 530, or 538

Credit: 2 semester-hours

EDUCATION 540 and 541(508). *Supervision in the Secondary School, Part I and Part II*

These courses emphasize the more practical phases of supervision which are met most frequently by those engaged in it. Among the topics are: organization for adequate supervision, supervision as encouraging and guiding the growth of teachers and the improvement of educational procedures, the supervisory functions of teachers' meetings, discussion groups, general and professional reading, the writing

of articles, cooperative curriculum modification, utilization of community resources, and teacher intervisitation.

Credit: 2 semester-hours each

EDUCATION 550(Eng. 547). *Guiding the Reading Interests of Secondary School Students: Part I. Materials and Sources*

EDUCATION 551. *Guiding the Reading Interests of Secondary School Students: Part II. Needs and Services*

The purpose of these courses is to prepare teachers to discover and improve the reading interests and attitudes of their students. Useful to all content area teachers and specialists who assign recreational and research reading, Part I particularly deals with fundamental bibliographical tools, the classroom teacher's relationship to the library, current source materials in book evaluation, and techniques for determining book selection. In Part II the teachers write their own book annotations and reviews, establish readability and suitability criteria based on a growing knowledge of child development, help build collections and services for young people which meet their personal needs through reading.

(EDUCATION 550 not open to those who have taken ENGLISH 547; EDUCATION 551 may be taken as Part II after ENGLISH 547.)

Credit: 2 semester-hours each

EDUCATION 552(556). *Principles of Reading Improvement in the Secondary School*

This is a course planned to present a deeper picture of the guiding principles and controversial issues which influence the teaching and learning of reading. Organized especially for the subject area teacher and the beginning reading specialist, recent non-clinical research and important professional and lay journals are studied to explore the pendulum of theory and practice in: the organization and administration of developmental reading programs, educational policies which affect reading, child development concepts and reading growth, systematic differentiation of individual needs, and reappraisal of the place of reading in our changing society. (Not open to those who have taken EDUCATION 556.)

Credit: 2 semester-hours

EDUCATION 553(430, 557). *Techniques of Reading Improvement in the Secondary School*

This is a practical course dealing with popular techniques useful in the improvement of non-clinical reading difficulties found in the content subjects. Planned especially for the subject area teacher and the beginning reading specialist, a study is made of secondary school reading needs, and specific suggestions are outlined for guiding the slow, average, and gifted student to success in reading up to his capacity in a classroom situation. Through an actual study of the more widely used reading workbooks, films, slides, tachistoscopic instruments, and texts available in the Reading Laboratory facilities, a practical approach is made to building a repertoire of reading skills in many areas.

(Not open to those who have taken EDUCATION 430 and EDUCATION 557.)

Credit: 2 semester-hours

EDUCATION 554 (ENGLISH 430). *Case Studies of Reading Difficulties: Part I. Testing*

EDUCATION 555. *Case Studies of Reading Difficulties: Part II. Reporting*

These are the basic courses in learning to use diagnostic materials and learning to write up diagnostic findings. In Part I, after making a thorough study of the most frequently used current test instruments and inventories, each teacher applies this knowledge to the actual testing of a child with reading problems. Particular attention is given to the unique values of group and individual tests, survey and diagnostic tests, and standardized and informal tests. In Part II the class learns to interpret test data. Practice in case reporting to parents, schools, and agencies is undertaken.

(EDUCATION 554 not open to those who have taken ENGLISH 430; EDUCATION 555 may be taken as Part II after ENGLISH 430.)

Credit: 2 semester-hours each

EDUCATION 556N(530A, 558). *Corrective and Remedial Reading: Part I. Causation*

EDUCATION 557N(530B, 558). *Corrective and Remedial Reading: Part II. Treatment*

These are causation and treatment courses planned for the teacher and specialist who are involved in some aspect of remedial instruction

in reading improvement. Part I offers an opportunity to extend training by investigation and interpretation of the more serious reading problems. A study is made of the constellation of causes of reading difficulties and techniques of remedial and corrective treatment are projected. In Part II particular attention is paid to the selection and adaptation of suitable improvement devices and curriculum materials. Illustrative cases are drawn from actual clinical experiences by requiring participation in the program of the Reading Laboratory.

(EDUCATION 556N not open to those who have taken EDUCATION 530A and EDUCATION 558; EDUCATION 557N not open to those who have taken EDUCATION 530B and EDUCATION 559.)

Prerequisite: Permission is needed to take these courses

Credit: 2 semester-hours each

EDUCATION 560(500B). *Advanced Educational Psychology.*

The course covers the various aspects of growth. Individual differences, their measurement, and their bearing on educational practices and principles furnish topics of study and discussion. Principles and laws of learning are reviewed. Some time is given to problems of personality as encountered in school work. The several points of view which have been prominent in the psychology of the past fifty to seventy-five years are examined for their contributions to thinking about human nature.

Prerequisite: An introductory course in psychology

Credit: 2 semester-hours

EDUCATION 561(550). *Child and Adolescent Development*

This course reviews the general characteristics of child and adolescent development: motor and physiological, social, emotional, language, intellectual, and interests and ideals. The influences of home, school, community, and institutional life on child and adolescent development are considered as well as problems of guidance presented by children in the normal course of development and also those presented by deviations from the normal course.

Credit: 2 semester-hours

EDUCATION 562(520). *Principles of Mental Hygiene*

This course is designed to be a general survey of the principles and practices of mental health with special reference to the mental

health of teacher and pupil. It involves a thorough grounding in fundamental principles of mental hygiene with much practical consideration of the mental health values of instructional programs and procedures. Discussion centers on practical efforts to develop wholesome personalities in our schools.

Credit: 2 semester-hours

EDUCATION 564(554A). *Psychology and Education of Exceptional Children: Physical and Mental*

This course surveys current practices and problems in the education of children with physical and mental handicaps, and of gifted children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children.

Prerequisite: A course in child and adolescent psychology

Credit: 2 semester-hours

EDUCATION 565(554B). *Psychology and Education of Exceptional Children: Social and Emotional*

This course surveys current practices and problems in the education of socially and emotionally handicapped children. It is designed for teachers, counselors, supervisors, and administrators who may work with one or more such children or who may wish to prepare for school and community leadership in developing facilities for exceptional children.

Prerequisite: A course in child and adolescent psychology

Credit: 2 semester-hours

EDUCATION 566. *Psychology and Education of the Gifted*

This course is designed to present a complete picture of the bright and gifted young people in contemporary American life. It surveys the various practices involved in their education, as well as the psychological characteristics of this group and socio-emotional development. It is designed for teachers, counselors and administrators, and is conducted on an advanced level, allowing sufficient time for seminar discussions in addition to lectures.

Credit: 2 semester-hours

EDUCATION 567(521A). *Educational and Psychological Measurement in Guidance*

This course deals with fundamentals of educational and psychological measurements in guidance: test theory, statistical concepts, test construction, evaluation, and interpretation. The place of tests in the instructional program is stressed.

Prerequisite: This course is open only to those with teaching experience

Credit: 2 semester-hours

EDUCATION 568(521B). *Psychological Tests in Guidance Programs*

This course is designed to familiarize the student with various psychological tests and scales that may be used in guidance programs in the secondary school. The student is given practice in administering many types of group tests. This includes scoring the tests and evaluating the results, with a discussion of ways in which these results may be used. Much time is spent in actual laboratory demonstrations of tests, giving students an opportunity to serve as subjects and as examiners. Class discussion is based upon first-hand information gained through use of the tests, on readings, and on class reports.

Prerequisite: EDUCATION 567(521A)

Credit: 2 semester-hours

EDUCATION 573(560A). *Production of Audio-Visual Instructional Materials:*
and *Part I, Non-Projected Materials*

EDUCATION 574(560B). *Production of Audio-Visual Instructional Materials:*
Part II, Projected and Audio Materials

These two courses combine laboratory and seminar experiences in the organization and preparation of instructional materials for classroom use. They are intended for teachers, administrators, and audio-visual specialists who wish to develop ability to plan and produce audio-visual materials for instructional purposes. Students have opportunities to prepare pictures, slides, transparencies, displays, models, graphs, magnetic tapes, motion picture segments, and instructional television programs according to their interests and needs.

Part I deals with non-projected materials, such as drawings, charts and graphs, bulletin boards, feltboards, maps, demonstrations, exhibits and displays, dioramas, etc.

Part II includes production of projected and audio materials, such as slides, filmstrips, opaques, transparencies, magnetic tapes, motion pictures, television programs, etc.

These courses meet for three clock hours per week, since they involve primarily laboratory experiences.

Prerequisite: EDUCATION 408. *Selection and Utilization of Audio-Visual Materials*

Credit: 2 semester-hours each

EDUCATION 580(551). *Principles and Techniques of Guidance*

Topics included in this course cover : philosophy of guidance, history of the guidance movement, the need for guidance presented by children and adolescents. The methods of gathering useful data are studied, and school records, exploratory activities, tests, inventories, the case study approach, occupational information, and occupational data are treated as well as general methods of guidance with special stress on interviewing and counseling of students.

Credit: 2 semester-hours

EDUCATION 581(534). *Community Resources for Guidance*

This course deals with the various agencies, industries, and institutions available in the surrounding communities for use in guiding students. In addition to becoming familiar with the location and nature of these facilities students learn the techniques for arranging student interviews and visits. Class discussion and personal research are supplemented by field trips.

Prerequisite: EDUCATION 580

Credit: 2 semester-hours

EDUCATION 582(535). *Vocational Guidance*

This course is intended for counselors in the junior and senior high schools to obtain information about the principles and philosophy of vocational education and the techniques of counseling youths who wish to receive pre-employment training, and for counselors of out-of-school groups who are attempting to make readjustments to occupational life. Attention is also given to guidance techniques for job preparation and readjustment, the matching of educational and personal abilities to job specifications, the effects of social legislation on the employment of youths, and a study of techniques used in determining occupational needs and occupational changes.

Prerequisite: EDUCATION 580

Credit: 2 semester-hours

EDUCATION 583(536). *Educational Guidance*

This course is concerned with the facilities available for education after high-school graduation, the problem of further training for pupils leaving school before completing high school, and the academic problems of students while in school. A brief survey of colleges and college-admission procedures is made.

Prerequisite: EDUCATION 580

Credit: 2 semester-hours

EDUCATION 584(537). *Social-Moral Guidance*

This course is concerned with the non-vocational and non-academic personal and social problems of pupils as well as with the development of techniques by which counselors can integrate the pupil's personal life with the mores and customs of society. It also includes a study of the possible services of various community agencies and a study of the counselor's relation to problems of discipline and citizenship education.

Prerequisite: EDUCATION 580

Credit: 2 semester-hours

EDUCATION 585(538). *Group Guidance and Counseling Activities*

This course is concerned with the various techniques for helping individual pupils and for using group activities including role-playing as a guidance technique. The group activities considered include those of home rooms, activity periods, occupation courses, student field trips, placement follow-ups, college nights, and career days.

Prerequisite: EDUCATION 580

Credit: 2 semester-hours

EDUCATION 586(539). *Elementary School Guidance Services*

This course is designed for guidance counselors in the public schools with particular emphasis on the guidance services that may be offered in grades kindergarten through six. The guidance program, as established in the public schools, envisions supervision and administration of the guidance program from the kindergarten through graduation at grade twelve. It is important, therefore, that the guidance director understands the services that can be made available to the elementary school.

Prerequisite: EDUCATION 580

Credit: 2 semester-hours

EDUCATION 587. *Administration and Supervision of Guidance Programs*

This course is designed to acquaint the student with more complex aspects of the supervision and administration of a guidance program. It includes such topics as: developing and administering programs of student registration (course selection); theory and techniques of scheduling a modern high school; supervisory responsibilities of the director of guidance within and outside of the department; coordinating guidance activities in a multi-school district, etc. In general, this course is aimed at providing essential background for counselors desiring to establish or administer a guidance program in a high school or a multi-school system.

The primary method of study is the examination and evaluation of current guidance practices leading to the formation of proposals for improvement, and possible inclusion, in guidance programs where the student is working as a counselor and/or a director.

Prerequisites: EDUCATION 580 and 6 semester-hours credit in Area 3 of the Personnel and Guidance Master's degree program

Credit: 2 semester-hours

EDUCATION 588. *Techniques of Interviewing and Counseling*

This is an advanced techniques course in the counseling of individual students. The directive, non-directive, client-centered, and role playing approaches, as well as the case study methods are studied. Opportunity for demonstration and practice with these techniques are implemented with tape recordings, one way screens, and closed-circuit television.

Prerequisites: Twelve semester-hours of work in the Personnel and Guidance graduate program and permission of the faculty adviser

Credit: 2 semester-hours

EDUCATION 589. *Student Personnel Services in Higher Education*

This course is a study of the student personnel functions in two-year and four-year colleges. The areas to be included are: personal counseling, financial aid, dormitory management, health program, student activities and social programs; course selection, job placement, college admission and academic retention, administration and supervision of the program.

Credit: 2 semester-hours

EDUCATION 601. *Workshop in Education**Section A—Administration**Section B—Supervision**Section C—Curriculum**Section D—Guidance**Section E—Psychology*

The workshop course enables the graduate student to devote his time to an educational topic or school problem of current interest to him and to secure the help of the staff, fellow students, and college facilities in pursuing this study. Members of the workshop may meet together to discuss matters of common concern in respect to the current school situation. In addition, the student works independently on his own subject and at times meets with a small group interested in the same area.

In the past, students have worked on topics in such areas as these: problems in administration, guidance programs, extra-curricular activities, school philosophies, problems in supervision, curriculum planning, and community relations. The success of the workshop depends much upon the student knowing what he wants to accomplish in six weeks, the procedure being flexible enough to support his purposes. He must have his proposed problems for study approved by the Director of the Workshop before he enrolls for the course.

The workshop is offered only in the summer session. It is divided into five sections, as noted above. The student may enroll for four semester-hours of credit or for two, the four calling for two periods of scheduled time in the course daily, the two calling for one period of scheduled time in the course. The student taking the course for two credits enrolls for one of the five fields. The student taking it for four credits may do all the work in one of these five fields, or he may enroll for two hours of credit in one and two in another.

Credit: 2 or 4 semester-hours

EDUCATION 602. *Research Seminar in Guidance*

This course is designed to provide a laboratory situation for the exploration and study of the present practices with respect to the three major phases of the guidance program. Usually this seminar is given in conjunction with either Vocational (EDUCATION 582), Educational (EDUCATION 583), or Social-Moral (EDUCATION 584) Guidance. The major portion of the time is spent on field trips, in private investigation, and in research.

Prerequisites: EDUCATION 580, and previously or concurrently the related courses listed above

Credit: 4 semester-hours

EDUCATION 603(603B). *Principles and Practices of Research*

The purpose of this course is to give students an opportunity to complete research begun in EDUCATION 503; to collect, analyze, and interpret the data; to state the findings; to draw conclusions and generalizations; to write the research report together with an abstract; to give an oral report of the investigation before a committee of the faculty.

Prerequisite: EDUCATION 503

Credit: 2 semester-hours

EDUCATION 604(529). *Field Work in Guidance*

The aim of the course is to introduce the student to various aspects of guidance through experience in agencies actually dealing with such problems. Students observe and participate in activities of the agencies to which they are assigned and write full accounts of these observations and experiences. Some time is spent in discussing and evaluating these experiences and relating them to the literature of the subject. Prerequisites are: experience in teaching, familiarity with the literature on all aspects of guidance and mental hygiene, and EDUCATION 560, 562, and 580. This work is conducted by seminar and individual guidance. The hours for the conferences are arranged personally by student and instructor.

Credit: 4 semester-hours

EDUCATION 606. *Practicum in Guidance Services*

This course is designed to be a final summation of the counselor's preparation. It includes: investigation of programs in practice; development of guidance programs to meet specific school needs; evaluation of student personnel services.

Prerequisite: Completion of a minimum of 20 semester-hours in the Personnel and Guidance program

Credit: 2 or 4 semester-hours

SENIOR-GRADUATE COURSES

Most of the following courses are set up to serve graduate students as well as College seniors. To carry graduate credit, the course in question must be approved by the candidate's adviser. In all instances, EDUCATION 406, EDUCATION 409, and EDUCATION 410 will be accepted as work for either of the two graduate degrees in this department.

EDUCATION 401. *The Development of Educational Thought*

The purpose of this course is to study the major philosophical traditions and their educational implications in order to assist the student to develop his own philosophy of education. These philosophical traditions are studied in their historical and contemporary perspectives through texts and supplementary readings.

Credit: 3 semester-hours

EDUCATION 404. *Cocurricular Activities in the Secondary School*

This course is designed as an introduction to that part of the total school program falling outside of the area of regularly scheduled classes. A study is made of the role of the faculty advisor. The more usual cocurricular activities are considered.

Credit: 3 semester-hours

EDUCATION 405. *Teaching the Block-of-Time Program in the Secondary School*

Following a study of the philosophical and psychological bases of the block-of-time program, major emphasis is placed on the methodological problems involved in teaching the program and the development of resource units for use at different levels.

This course is open only to those students who have a major-minor combination of English and social studies.

Credit: 3 semester-hours

EDUCATION 406. *Educational Sociology*

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included:

family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

Credit: 3 semester-hours

EDUCATION 407A. *Television in Education Workshop: Programming and Production*

This is a laboratory course designed to develop the techniques, methods, standards, procedures, and criteria pertaining to the special place of television in education. Through the utilization of studio equipment together with the resources of all the academic departments of the college, student potentialities, campus life, and the community, students receive experience in planning, developing, and producing, television programs of educational value. Actual training is given in the use of standard television equipment on campus, and field trips are made to local television laboratories and studios.

Credit: 2 semester-hours

EDUCATION 407B. *Television in Education Workshop: Classroom Utilization*

This course is designed to give training in the following areas of television education: types of programs best suited for classroom use; practical applications of programs emanating from commercial stations; various subject areas in which television might be used such as language, science, art, social studies, etc.; script writing; coordination of program and school schedules; and the possible use of educational television stations and how they can best serve surrounding communities. Students are also introduced to the operation of both sending and receiving television equipment so that they may understand program possibilities and limitations.

Credit: 2 semester-hours

EDUCATION 408. *Selection and Utilization of Audio-Visual Materials*

Sources, selection, and evaluation of audio-visual aids are studied in this course. Techniques in developing individual reference catalogs of audio-visual aids are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

Credit: 2 semester-hours

EDUCATION 409. *Radio and Sound Equipment in the Classroom*

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record

players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

Credit: 2 semester-hours

EDUCATION 410. *Teaching Materials Workshop*

This course is for those persons who wish to study advance problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken EDUCATION 408 or will have had the equivalent in practical experiences.

Credit: 2 semester-hours

EDUCATION 411. *Educational Motion-Picture Workshop*

This course includes various phases of the planning and production of educational motion pictures. Students receive actual experience in scenario writing, costume research, set designing, lighting, photography, editing, and sound recording. During the course an educational film is produced as a class project.

Credit: 2 semester-hours

EDUCATION 415. *Seminar in the Problems of a Classroom Teacher*

This seminar deals with the problems commonly encountered by beginning teachers. It considers problems of classroom management, student behavior, teaching methods, teaching materials, curriculum adaptations, and the relation of the teacher to the total school community. It provides each student with an opportunity to analyze, evaluate and discuss student-teaching experiences. It makes provision for planning the student's approaching employment as a teacher.

Credit: 3 semester-hours

EDUCATION 420A and 420B. *The Community Centered School*

This course deals with the development and functions of the school as a community resource. Students assemble and interpret data relating to actual school and neighborhood situations. Consideration

is given to the social framework in which the school operates; racial and national minorities; intercultural education; truancy and delinquency; and the discovery and utilization of community resources. The use of school personnel and facilities to deal with racial problems is treated in light of the data assembled.

Credit: 2 semester-hours each

EDUCATION 421A and 421B. *Leadership of Activities and Services in Community Education*

This course is designed to prepare teachers and others to give leadership to community-education activities. Starting with the assumption that the school should serve as a community center, members of the course proceed to learn about the various activities and programs that can be initiated and carried on by the school. Consideration is given to programming, utilization of space and personnel, and care of equipment. Techniques for organizing and directing special programs such as scouting, folk dancing, crafts, field trips, production of films, forums and debates, etc., are included.

Credit: 2 semester-hours each

EDUCATION 422A and 422B. *The Organization, Administration, and Supervision of Programs in Community Education*

This is a workshop type of course which emphasizes the integration of school, social, recreation, and adult education programs. The course presents a survey of current trends in community education as adopted and implemented by boards of education throughout the country. Principles, policies, practices, and problems related to the administration and supervision of community-education programs are surveyed. The following types of programs are considered: summer playgrounds, day camps, after-school centers, evening centers, youth and adult recreation centers.

Credit: 2 semester-hours each

EDUCATION 440. *Camping and Outdoor Education*

The purpose of this course is to familiarize the students with camping and outdoor education as educational methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for a position in summer camps. This course

is usually given at the New Jersey State School of Conservation, Stokes State Forest.

Credit: 2 semester-hours

EDUCATION 441. *Conservation Education*

This course is designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels. The need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these resources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this a useful introductory course for all teachers.

Credit: 2 semester-hours

EDUCATION 442. *Practicum in Camp Leadership*

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to help deal with the practical problems as they arise.

Credit: 2 semester-hours

EDUCATION 444. *Practicum in Conservation Education*

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and to conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participating in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion.

Prerequisite: EDUCATION 441, *Conservation Education*, or SCIENCE 412, *Field Studies in Science: Biological*, or SCIENCE 413, *Field Studies in Science: Physical*, or the equivalent

Credit: 2 semester-hours

EDUCATION 450. *Psychological Foundations of Personality*

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation are considered.

Credit: 3 semester-hours

EDUCATION 451. *Guidance for the Classroom Teacher*

This course is designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom. This course is also designed to give the new teacher a picture of the place of guidance in the modern school, to indicate what guidance is and what it is not, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor.

Credit: 3 semester-hours

EDUCATION 452. *Psychology and Education of the Handicapped*

This course is for the preparation of teachers of handicapped children and youth. It orients prospective teachers of regular classes to the special needs of those with handicaps of sensory, motor, intellectual, emotional, and neurological origins. Both the theoretical psychological aspects and the practical applications to the classroom are studied. The course includes analysis of case material.

Credit: 3 semester-hours

EDUCATION 453. *Social Psychology*

This course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues.

Credit: 3 semester-hours

EDUCATION 461. *The Junior High School Curriculum*

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are covered. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

Credit: 3 semester-hours

EDUCATION 462. *Survey of Reading Methods in Secondary School Subjects*

Planned especially for the inexperienced teacher in all subject matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. New teachers will want an overview of: the physiological, psychological, and sociological factors in reading; resources available to the reading-minded teacher; and the school's responsibility for helping the student build an inventory of reading skills by utilizing reading opportunities in the entire curriculum.

Credit: 3 semester-hours

EDUCATION 463. *Reading and the Improvement of Study Skills*

This is a course in "How to Study" designed to prepare teachers to help junior-senior high school students to achieve greater effectiveness in their reading-study habits. After examination of recent materials and research, the class develops a series of practical methods for teaching and learning: the SQ3R approach, the best methods for taking examinations, the application of reading to problem solving, the development of memory and concentration, and the various techniques for taking and organizing reading notes, and the reading of homework assignments. (Not open to those who have taken EDUCATION 530C).

Credit: 3 semester-hours

EDUCATION 464. *Foundations of Reading Instruction*

Good first teaching of reading is of primary importance in the sequential development of reading skills which extend into the junior and senior high school. In this course methods and materials currently in use in elementary reading programs are studied with a view toward increasing the power of both the teacher and the learner. How the reading process begins, and how it is reinforced are topics fundamental to all upper grade teachers who are faced with the problem of continuing reading skills development in all curriculum areas. (Not open to those who have taken EDUCATION 532).

Credit: 3 semester-hours

EDUCATION 465. *College Reading and Study Improvement Laboratory*

This workshop course is designed for those college students who feel that reading-study problems are interfering with their normal

school progress. Students engage in supervised practice experiences which promote vocabulary growth, more flexible reading speeds, comprehension and recall improvement, skimming competency, and better interpretative and critical reading techniques. Particular attention is given to reviewing for examinations, keeping up with daily reading assignments, taking notes, and organizing the reading content into main and sub-topic structure. Students may volunteer for this course or be recommended by a faculty member.

Credit: 3 semester-hours

EDUCATION 480. *Field Science for Elementary Teachers*

Working in a natural setting, rather than an artificial laboratory, this course stresses firsthand experience with natural phenomena and suggests what can be done to convey an understanding of these things to the elementary school student. In developing an understanding of natural resources consideration is given to such areas as rocks and minerals, plant and animal life, astronomy, weather, and all outdoor phenomena, both physical and biological. If desired, collections are made under supervision, and some latitude is provided for individual specialization in some phase of field science. The student needs no formal scientific background for this course. Methods of teaching on the elementary school level as well as subject-matter content are included. Simple demonstrations, experiments, collections, acquisition of free and inexpensive materials, reference publications, and the most recent methods and trends in field trip procedure are considered.

Credit: 2 semester-hours

EDUCATION 491. *Measurement and Evaluation in Teaching and Learning*

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas and in appraising, marking, and reporting pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles test scores, and interprets test data.

Credit: 3 semester-hours

EDUCATION 492. *Comparative Education*

The educational systems of Europe, Asia, Africa, and Latin America are studied in an attempt to gain insight into the essential qualities of

American education. In this process the relationship between the educational system of each culture and its history, economy, and political and social organization should emerge. Factors causing progress and change in education since 1900 are observed.

Credit: 3 semester-hours

THE DEPARTMENT OF ENGLISH

Graduate study in the Department of English is designed:

1. To broaden the understanding and appreciation of the culture of the Western World through extended study of the literature of Great Britain and the United States, of those European nations which have contributed much to our American heritage, and of those Oriental nations now exerting an increasing influence upon the modern world.
2. To examine the function of English language communication in the modern world through study of its historical development, its psychological nature, its critical expression, and its practice in the language arts.
3. To enrich the professional background of English teachers through investigation of research and experimentation designed to improve instruction in English in the secondary school.

Requirements for Graduate Study in the English Department

The candidate for the Master's degree must present an undergraduate major of at least twenty-four semester-hours in English or complete the required number with prerequisite courses prescribed by the Chairman of the Department before matriculation.

Upon matriculation each candidate receives from the Chairman of the Department an approved course outline distributed as follows:

A. *Basic Professional Education* 6 semester-hours

These courses include a full year of research as prescribed in EDUCATION 503 and EDUCATION 603 or the equivalent of EDUCATION 603 in a departmental seminar such as ENGLISH 507, 516, 517, 519, or 541.

B. *Departmental Course Requirements*

I. American Literature Minimum requirements
4 semester-hours

To be selected from among ENGLISH 406, 407, 443, 525, 533, 537, 538, 543, 545A, 545B.

II. English Literature Minimum requirements
6 semester-hours

To be selected from among ENGLISH 402, 404, 406, 407, 420, 421, 443, 502, 503, 505, 506, 515, 518, 521, 531, 532, 535, 544A, 544B.

III. World Literature Minimum requirements
4 semester-hours

To be selected from among ENGLISH 432, 451, 452, 513, 514, 520A, 520B, 528, 530, 534, 536, 539, or 548.

IV. Language Communication Minimum requirements
4 semester-hours

a. Language Study

To be selected from among ENGLISH 408, 419, 511, 512, or 516.

*b. Reading Improvement

To be selected from among EDUCATION 556, 557, 558, 559.

*c. Speech

To be selected from among SPEECH 410, 435, 448, 449, 454, 456, 457, 461A, 461B, 462, 463, 464, 466, 467, 468, or 522.

C. *Electives* 8 semester-hours

In meeting this requirement the Department urges candidates for the Master's degree to explore the offerings in other departments and select as widely as possible in those areas not represented in undergraduate study. Such electives help the candidate to achieve the first purpose of graduate study in the Department, "to broaden appreciation of the culture of the Western World."

TOTAL SEMESTER-HOURS REQUIRED FOR THE A.M. DEGREE
IN ENGLISH 32

D. *Department Examination or Master's Thesis*

If a candidate begins a project in English in EDUCATION 503 and requires more time to complete it but cannot complete it in EDUCATION 603, he may, upon consulting the Chairman of the Department, complete the project in one of the following English Courses: 507, 516, 517, 519, depending upon their being offered.

If a candidate with an outstanding record wishes to evolve a research project in English developed in EDUCATION 503 and 603 into a thesis, a departmental sponsor will be appointed. The "Regulations of Research and Thesis Requirements" will be followed in the completion and acceptance of the thesis.

* A course in reading improvement or speech may be offered as two of the semester-hours required in the area of language communication.

Otherwise, each candidate must pass a written comprehensive examination before the degree is awarded. A part of this examination is a brief oral examination conducted by members of the Graduate Faculty of the Department. The Chairman of the Department announces to the Registrar as well as to members of the Department the date of the examination which will be given in April of each calendar year and will provide candidates with the information desired to prepare for it.

GRADUATE COURSES

ENGLISH 502. *Victorian Poetry*

The most important English poets who wrote during the transition from the Victorian to the modern period are read and discussed. An important feature of the course is the analysis and appreciative reading of the lyric poetry of Rossetti, Swinburne, Hardy, Bridges, G. M. Hopkins, Francis Thompson, A. E. Housman, Kipling, and W. B. Yeats.

Credit: 2 semester-hours

ENGLISH 503. *Geoffrey Chaucer and His Times*

Some of the works of Chaucer are read rapidly, others studied intensively, so that the students may acquire a broad general understanding of Chaucer's place in the history of English literature as well as facility in reading and interpreting the medieval text of his stories.

Credit: 2 semester-hours

ENGLISH 505. *Philosophy and British Poetry of the Nineteenth Century*

This course is designed to show the mutual interrelations between currents of philosophic thinking and their influence in selected writings of major poets from Wordsworth to Matthew Arnold.

Credit: 2 semester-hours

ENGLISH 506. *John Milton*

This course has for its primary aim the understanding and evaluation of Milton's poetry. Contributory to this aim are the following topics: Milton's literary heritage and influence; his leading position in the Puritan struggle for civil and religious liberty as revealed in the prose writings; and the biographical materials.

Credit: 2 semester-hours

ENGLISH 507. *Critical Writing*

This course evolves a body of critical principles for judging art and literature, and provides training in the writing of criticism, ranging from comments upon pupils' themes to a full and comprehensive essay upon the work of some outstanding author. The course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 511. *The History of Literary Criticism*

The purpose of this course is to familiarize the student with the chief doctrines of the great critics from Aristotle to I. A. Richards and T. S. Eliot and to correlate these critical doctrines with the outstanding writings of each age. By such a study it is possible for the student to evaluate the historical interrelations of expert criticism and literary production. A basic text is used, but much of the information is gleaned from source materials.

Credit: 2 semester-hours

ENGLISH 512. *The Growth and Structure of the English Language*

This course is designed to help the high school teacher understand the structure of modern English, one of the most complicated of contemporary tongues. Through an analysis of the historical evolution of our language, the student discovers the reasons for many of the seemingly illogical and arbitrary characteristics of modern English spelling, grammar, and morphology.

Credit: 2 semester-hours

ENGLISH 513. *The Renaissance*

This course deals with Petrarch and the Humanists; Boccaccio and the *Novelle*; the House of the Medici, Savonarola, the Popes; Machiavelli and *The Prince*; Cellini and the *Autobiography*; Castiglione and *The Courtier*; Boiardo, Pulci, Ariosto, and the romantic epic; the drama; Rabelais and *Gargantua and Pantagruel*; Ronsard and the French *Pleiade*; Cervantes and *Don Quixote*; and the art of Da Vinci, Botticelli, Michelangelo, Raphael, Titian, and others.

Credit: 2 semester-hours

ENGLISH 514. *Origin and Development of the Arthurian Legend*

This course deals with the vague and tentative beginnings of the Arthur story in early chronicle legend; with Geoffrey of Monmouth's

pseudo-historical and Chretien de Troyes's romantic treatments; with the great medieval recapitulations of Gottfried von Strassburg, Wolfram von Eschenbach, and Sir Thomas Malory; with the Victorian retellings of Tennyson, Arnold, and Morris; with the musical adaptations of Wagner; and with the modern versions of E. A. Robinson. It includes a detailed history of the development of the legend in its divers forms.

Credit: 2 semester-hours

ENGLISH 515. *Robert Browning*

Browning's characteristic shorter poems are recalled or studied in order to define his fundamental ideas as a writer. This study is followed by a study of his longer poems and dramas, the "soul-studies," and Browning's masterpiece, *The Ring and the Book*. These works are studied to illustrate the development of Browning as man, poet, and philosopher, and a reflection of certain phases of Nineteenth-Century life and thought.

Credit: 2 semester-hours

ENGLISH 516. *Language Problems in the English Curriculum*

This course reviews the several theories of language, and studies the problem of meaning in order to arrive at a suitable technique for the interpretation of prose and verse. This technique is then applied to the problems of reading, of composition, of speech, and of appreciation of literature. The course has two aims: to increase the student's own skill in dealing with language, and to increase his effectiveness in teaching. The course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 517. *Recent Research and Experiment in the Teaching of English*

This course evaluates current research in the fields of language, literature, and composition, and examines recent experiment in methods of teaching English. The course throws light on the problems of English teaching in secondary schools and evaluates tendencies in this field. The course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 518. *The Major Romantic Poets*

This course of Coleridge, Wordsworth, Scott, Byron, Shelley, and Keats devotes especial attention to the poems which are best adapted for the reading of high school students.

Credit: 2 semester-hours

ENGLISH 519. *English in the Modern High School*

This seminar considers the methods and materials requisite to the development of a program in the language arts (listening, speaking, reading, and writing). The course is accepted for certification by the State Department of Education. The text is Bulletin No. 17 of the State Department, *Growth in Language From Kindergarten Through High School*.

Credit: 2 semester-hours

ENGLISH 520A and 520B. *Great Books on Education*

Students examine the classics dealing with educational theory and practice which they so often read about but rarely consult. Part A deals with Plato's *Republic*, Xenophon's *Cyropaedia*, Cicero's *De Oratore*, Castiglione's *The Courtier*, Machiavelli's *Prince*, Rabelais's *Abbey of Theleme*, Ascham's *Schoolmaster*, Bacon's *Novum Organum*, Defoe's *Projects*, Milton's *To Samuel Hartlib on Education*. Part B deals with Rousseau's *Emile*, Byron's *Don Juan*, Hughes' *Tom Brown's Schooldays*, Newman's *Idea of a University*, the Arnold-Huxley debates, and the works of John Dewey and Jacques Barzun. This course is recommended for graduate students in the Department of Education.

Credit: 2 semester-hours each

ENGLISH 521. *English Literature of Social Problems*

This course surveys English literature from 1800 to 1914. The principal authors discussed include Shelley, Dickens, Kingsley, Tennyson, Carlyle, Butler, Meredith, Galsworthy, Bennett, Shaw, and Wells.

Credit: 2 semester-hours

ENGLISH 525. *The Development of the American Novel*

The American novel as a contemporary art form is examined in this course. Beginning with the novels of the early Nineteenth Century, the course traces the rise and development of the Romantic and the Realistic novel and concludes with an example of American Naturalism. Written criticism of five novels is required of candidates for the A.M. degree.

Credit: 2 semester-hours

ENGLISH 528. *New Perspectives in World Literature*

The point of view of our own democratic culture is surveyed and established in an attempt to see how the literatures of Western

Europe, the Middle East, and the Orient have influenced and are influencing modern thinking. Such perspectives are designed to provide adequacy in teaching a world point of view through literature.

Credit: 2 semester-hours

ENGLISH 530. *Dante and His Influence in England and America*

Fully two-thirds of the time of this course is devoted to rereading and reassessment of Dante himself in English translation. When Dante's meaning has been revealed, his continued influence from Chaucer through Sackville, Spenser, and Milton to Rossetti, Longfellow, and T. S. Eliot becomes the subject of investigation.

Credit: 2 semester-hours

ENGLISH 531. *Seventeenth Century Literature*

This course investigates the prose style and intellectual content of such writers as Bacon, Burton, Walton, Hobbes, Bunyan, Pepys, and Dryden. Similarly, it studies the poetic expression of experience in Donne, Jonson, Herbert, Herrick, Cowley, Vaughan, Suckling, Lovelace, Waller, and others.

Credit: 2 semester-hours

ENGLISH 532. *The Victorian Novel*

This course is an intensive study of the novel in Victorian England. A review of the development of the English novel before this period is followed by studies in the works of Dickens, Thackeray, Austen, Eliot, Trollope, Meredith, and Hardy. Novels studied in the high school are treated professionally.

Credit: 2 semester-hours

ENGLISH 533. *Masters of American Literature*

Significant American writers, including Irving, Hawthorne, Poe, Emerson, Melville, Whitman, and Mark Twain, are studied to discover their contributions to American life and to reveal important forces in our national background.

Credit: 2 semester-hours

ENGLISH 534. *Medieval Epic, Saga, and Romance*

This course deals with the chief medieval epics, sagas, and romances translated into Modern English from the literature of England,

France, Germany, Ireland, Iceland, Wales, and Italy. Attention is given both to those narratives which reflect the life of a particular country and to those which are international and express more generally the spirit of medieval Europe.

Credit: 2 semester-hours

ENGLISH 535. *Eighteenth Century Literature*

Major essayists, poets, dramatists, novelists, and letter writers are read and evaluated in terms of the thought, life, and literary movements of their own time and in terms of their significance for the present generation. Authors studied include Addison, Steele, Defoe, Swift, Goldsmith, Sheridan, Gray, Johnson, Boswell, Cowper, Richardson, Fielding, Sterne, Smollett, and Burke. High-school classics receive special attention.

Credit: 2 semester-hours

ENGLISH 536. *Philosophy of Great Literature*

By studying one or two masterpieces in a given semester, this course aims to help the student achieve a systematic understanding of the philosophic world-views and life-views implicit in such works as: Aeschylus's *The Oresteia*; Plato's *Timaeus*; Boethius's *Consolations of Philosophy*; Dante's *Divine Comedy*; Shakespeare's *Hamlet*; Milton's *Paradise Lost*; Pascal's *Pensees*; Goethe's *Faust*; Blake's *The Marriage of Heaven and Hell*; Dostoevski's *Brothers Karamazov*; Mann's *The Magic Mountain*; Hesse's *Demian*; Henry Adams' *Mont St. Michel and Chartres*; the *Bhagavad-Gita*; Lao-tse's *The Book of Tao*; and Auden's *Collected Poetry*.

Credit: 2 semester-hours

ENGLISH 537. *American Drama in American Democracy*

This course uses plays produced upon the American stage to illustrate the development of democratic concepts from Colonial Days to the contemporary theatre.

Credit: 2 semester-hours

ENGLISH 538. *American Literature of Social Problems*

This course surveys the American literature which presents social problems during the period from 1800 to 1914 to discover the attitudes of the various authors toward these problems. The works of such authors as Cooper, Lowell, Thoreau, Whitman, Howells, Bellamy, Garland, and Glasgow are studied from this point of view.

The social background of the period is discussed to give perspective but the emphasis is upon the reflection of the problems in literature.

Credit: 2 semester-hours

ENGLISH 539. *Theatre and Society*

Dramatic expression from the time of the ancient Greeks to the present is studied carefully to analyze social, political, and ethical trends as they are reflected in the drama. The members of the course prepare analyses of social trends in contemporary drama. This research provides the basis for reports given during the latter part of the course.

Prerequisite: ENGLISH 102 or its equivalent

Credit: 2 semester-hours

ENGLISH 541. *The Teaching and Appreciation of Poetry*

This course is both personal and professional. It develops the student's appreciation of poetry as an expression of life and as a form of art, and it considers in detail the aims and methods of teaching poetry. This course is conducted as a seminar.

Credit: 2 semester-hours

ENGLISH 543. *Contemporary American Literature*

This course studies the major authors and literary movements in America during the contemporary period. Beginning where the course in *Masters of American Literature*, ENGLISH 533, normally ends, it is designed to complete a unit in this subject.

Credit: 2 semester-hours

ENGLISH 544A and 544B. *Shakespeare*

This course, in two parts, presents all of Shakespeare's plays as opposed to those taught only in high school, which is the chief concern of ENGLISH 301B. Here the poet's full development can be seen, providing a complete critical experience. Critical analysis, contentual evaluation, and textual problems are the main areas of concern. Part A deals with the tragedies; Part B, the comedies. The chronicle plays are woven into the discussion.

Credit: 2 semester-hours

ENGLISH 545A and 545B. *American Literature*

The chronological survey reflects the interplay of life and letters in the American scene, examining the political, social, and ethical motivations of the great movements in literature, and reading the separate works in the light of the influences that brought them into being. Part A commences with the Puritan Tradition and ends just as the Civil War is beginning. Part B traces, in life and in literature, the growth of the great democratic tradition in America.

Credit: 2 semester-hours

ENGLISH 548. *Fiction as an Image of World History*

This course presents a sequence of historical and cultural novels which aims to present insight into the eras of man's history from pre-historic to present time. Among novels read are: Jensen, *The Long Journey*; Mann, *Joseph and His Brothers*; Yourcenas, *Hadrian's Memoirs*; Merejowski, *The Romance of Leonardo da Vinci*; Reade, *The Cloister and the Hearth*; and Manzoni, *The Betrothed*.

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

For more complete descriptions of these courses see the undergraduate catalog.

ENGLISH 402. *Survey of British Literature to 1798*

This course draws together into a systematic narrative the story of the development of English literature from the beginnings to the romantic triumph in 1798.

Credit: 3 semester-hours

ENGLISH 404. *Survey of British Literature*

This course is a continuation of ENGLISH 402. It takes up the story with the romantic triumph of 1798 and continues to the present time.

Credit: 2 semester-hours

ENGLISH 406. *The Modern Novel*

Emphasis is given to British and American novels since 1870, and the important tendencies of present-day prose fiction are explored. Students are taught how to read a novel with profit, and how to guide and direct the reading of others.

Credit: 2 semester-hours

ENGLISH 407. *British and American Biography*

Both the old and new types of biography are read and studied in this course, with emphasis upon the Nineteenth and Twentieth Centuries. Biography is presented for its cultural and informational value, for its use in integrating the work of the various departments in the high school, and for its direct help in the vocational guidance program.

Credit: 2 semester-hours

ENGLISH 408. *Creative Writing*

Students in this course attempt seriously to write the standard literary forms in prose and verse. Each student is assisted in finding his own best field of writing, and is given further training in that field. The course is based entirely upon the needs of the class as revealed in student-written manuscripts. Much time is devoted to

criticism and discussion of mutual problems. Wherever possible, the course is made to reflect methods of creative teaching in the field of composition.

Credit: 2 semester-hours

ENGLISH 413. *Modern Poetry*

This course deals with the work of contemporary poets, both British and American. Much of the best modern poetry is studied for interpretation and appreciation. The distinctive poetry "movements" that have occurred during the present century are examined as expressions of changing social and artistic ideals. Critical appreciation of poetry is developed through comparison of the diverse styles, themes, and poetic theories present in modern poetry.

Credit: 2 semester-hours

ENGLISH 419. *Grammar for Teachers*

This course is a study of the basic facts of grammatical relationships in English, and of the current problems of "rules" as opposed to "usage." The primary aim of the course is to acquaint students with the true functions of grammar in speech and writing.

Credit: 2 semester-hours

ENGLISH 420. *High School Classics*

This course is a seminar for prospective student teachers on the problems of teaching literature in high schools. The student reads numerous articles on the "classics" vs. "moderns" controversy, becomes thoroughly acquainted with the contents and aims of the best high school anthologies currently in use, and builds up a working philosophy for his own teaching.

Credit: 2 semester-hours

ENGLISH 421. *The Short Story*

The course traces the history of the short story as an evolving literary form, emphasizing the productions of the Nineteenth and Twentieth Centuries. Many stories are analyzed for both human and literary values. Professional use of the short story is the guiding purpose in the conduct of the course.

Credit: 2 semester-hours

ENGLISH 428. *The Film and Society*

This course considers the impact of the motion picture on our culture. The film is studied and evaluated as a powerful social and educative force, as an art form, and as an entertainment medium. The origin and development of film techniques are treated, and films are shown at each session, accompanied by analysis and discussion. The scenario as a literary type and the adaptation of prose fiction for film purposes are included in the course content.

Credit: 2 semester-hours

ENGLISH 432. *The Development of the Drama*

The development of the drama is studied in all periods from ancient Greece and Rome through the Middle Ages and the Renaissance to the beginning of modern drama with Ibsen. The emphasis is placed on the major characteristics of the drama and its necessary complement, the theater. Representative plays are read and discussed.

Credit: 2 semester-hours

ENGLISH 443. *Modern Drama*

An historical survey of trends, dramatists, plays, and accomplishments from Ibsen to the latest prize plays on Broadway provides background for this course. An examination of the structure and content of plays to determine what constitutes a good play stimulates appreciation. Students are encouraged to read widely and to see current productions on Broadway.

Credit: 2 semester-hours

ENGLISH 446. *The One-Act Play*

This course studies the one-act play as an art form, devoting special attention to plays which are suitable for high school production.

Credit: 2 semester-hours

ENGLISH 451. *Literature and Art in Western Culture*

This course deals with the nature of literature and considers its importance as a factor in the development of international understanding. Through reading the literature which is being read by our neighbors today, both in Europe and in the Western Hemisphere, students are able to participate in a common experience with them.

Credit: 2 semester-hours

ENGLISH 452. *Five Great Books*

The aim of this course is to broaden and to deepen the student's general cultural perspective by a study of five books which have profoundly influenced present civilization. The actual choice of texts is a cooperative class enterprise. Selections are made from such books as: *The Bible*, Homer's *Odyssey*, Plato's *Republic*, Shakespeare's *Hamlet*, Rousseau's *Confessions*, Goethe's *Faust*, Tolstoy's *War and Peace*, Dewey's *The School and Society*. This course is designed to provide leadership in local "Great Books" meetings.

Credit: 2 semester-hours

DEPARTMENT OF FOREIGN LANGUAGES

In answer to the growing demand for graduate work, the Foreign Language Department offers a program based on STUDY ABROAD. Through personal contact and experience, the student, thus, can increase both his knowledge and understanding in respect to the people whose language he is preparing to teach. This means that the student does part of his graduate work at a selected college in a country where the language of his major is spoken. To assist with this program of STUDY ABROAD, the Foreign Language Department yearly offers scholarships for qualifying applicants. These scholarships are sustained by a Student Exchange Fund. Students who are interested in obtaining a Study Abroad scholarship should consult with the Chairman of the Department for particulars. This program is open only to graduates of Montclair State College. Ten semester-hours of graduate credit are granted for this work. The remaining twenty-two hours necessary for the Master's degree are to be selected from graduate courses offered at Montclair. There is also required a final comprehensive examination in the student's major field. The following plan outlines the work for a Master's degree in the Department of Foreign Languages:

I. <i>Basic Professional Course Requirements</i>		<i>Credits</i>
Education 503. <i>Methods and Instruments of Research</i>		2
Education 603. <i>Principles and Practices of Research</i>		2
Elective in Education		2
		<hr/>
		6
II. <i>Requirements in Foreign Language Department</i>		
French 502. <i>Study Abroad</i>		
or		10
Spanish 502. <i>Study Abroad</i>		
Courses in Department		8
		<hr/>
		18
III. <i>Electives in Department or Other Departments</i>		
To be selected in consultation with the Graduate Counselor of the Foreign Language Department.		8
		<hr/>
Total		32
IV. <i>Final Examination</i>		

GRADUATE COURSES IN FRENCH

FRENCH 406. *The Contemporary French Novel*

This course is designed to acquaint students with the history and development of the French novel from Proust to the present day. Major currents and trends are analyzed; works of modern novelists, including Proust, Gide, Malraux, Sartre, and Camus are read and discussed. This course is conducted entirely in French.

Prerequisite: At least three years of college French and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

FRENCH 421. *French Language Seminar*

This course is designed to acquaint students on the graduate level with the effective use of the laboratory in language teaching. Problems relating to materials, methods, new techniques, facilities, and scheduling are discussed. This course is conducted entirely in French.

Prerequisite: An interview with the instructor

Credit: 2 semester-hours

LANGUAGE 402. *Advanced Phonetics*

This course is designed to provide students on the graduate level with a thorough foundation in Phonetic theory. Practical applications of this theory to the teaching of pronunciation and to the making of laboratory materials for correction of pronunciation are emphasized. Transcription and text analysis are practiced. Intensive work is done in the Language Laboratory.

Prerequisite: FRENCH 310 or equivalent, or interview with the instructor

Credit: 2 semester-hours

LANGUAGE 515. *The History of the French Language*

This course is designed to acquaint the student with the developmental processes in language with special reference to French. It examines also the relationship between language change and cultural change. The French language is studied from its origins to the present time with units in Vulgar Latin, Old French, Middle French, Renaissance French, and Modern French. At each step, development phonology, morphology, and vocabulary are studied along with social backgrounds.

Prerequisite: 2 years of High School Latin

Credit: 2 semester-hours

GRADUATE COURSES IN SPANISH

SPANISH 415. *Projects in Spanish and Spanish American Folklore*

The purpose of this course is to give the Spanish teacher and Spanish majors a good understanding of the culture of Spain and Spanish America through the study of the different folklore expression of those countries. The traditions, the customs, the music and dances of the different regions of Spain and of the several Spanish nations, including Puerto Rico, are studied with a view of understanding sources and the influence that they have had in the history and lives of the peoples of those countries.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

SPANISH 425. *Contemporary Spanish-American Poetry*

This course considers the development of Spanish-American poetry from 1890 until recent times including Ruben Dario, the impact of *Modernismo* in Spanish literature, the anti-modernist reaction, and the four major feminine poets, as antecedent for the appreciation and evaluation of Neruda, Pellicer, Marechal, Borges, Gorostiza, Carrera Andrade, Florit, Villaurrutia and Octavio Paz. Readings from recently published books and poetry magazines of wide circulation in Latin America are included.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

SPANISH 430A. *The Spanish Short Story, I*

This course covers the study of the origin and development of the short story in Spain from the Middle Ages to the present time. Different types of short stories are studied in order to explain historically and sociologically the appearance of themes written in Spanish through the centuries. The aim of the course is to give the student additional understanding of the Spanish people, culture, and history as expressed by the Spanish short-story writers from the Thirteenth Century to the present Twentieth Century. This course is open only to seniors and graduate students.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

SPANISH 430B. *The Spanish Short Story, II*

This course covers the study of the Spanish short story as it developed in Hispanic America. This course is open only to seniors and graduate students.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

SPANISH 505. *Spanish Literary Expression and Style*

This course presents a complete review of language skills through the study of representative Spanish literary schools and periods, with emphasis on vocabulary building, oral and written literary expression. The theory and practice of interpretation, the analysis of problems, language structure, and semantics are included. Practical exercises, composition, and comparison between original Spanish works and their English translations form an important part of the course work.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

SPANISH 506. *Spanish American Novel*

The purpose of this course is to acquaint the student, through extensive reading and intensive discussion, with representative Spanish American novels from the XVI Century to the present time. These works include narratives depicting life in early colonial times; the novel of adventure; the picaresque tale; the romantic novel in its many different expressions, historical, indianistic, and descriptive; the psychological novel; the novel of the land; and the sociological novel. The students acquire a fundamental understanding of the history, life, customs, traditions, problems, and strife of the Spanish American people, as interpreted by their best novelists. The lives of the authors are studied to present a better picture of the country and the special circumstances depicted in the literature. The students are asked to evaluate the books studied as well as the criticism on them. Through this course the teacher of Spanish should become more thoroughly acquainted with the masterpieces of the Spanish American novel.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

LANGUAGE 402. *Advanced Phonetics*

This course is especially designed for Spanish teachers who wish to achieve a correct pronunciation and enunciation according to the best patterns of speech of the Spanish language. An intensive study is made of the manner and of the place of articulation of sounds heard in the Spanish spoken by the educated vernacular speakers of Spain and Spanish America. Skill is developed in the formation of the sounds of the Spanish vowels and the student is asked to compare them to the English vowels, marking differences. The difference between the articulation of the Spanish and the English consonants is demonstrated.

Prerequisite: At least three years of College Spanish and an interview with the instructor for others than Montclair State College graduates

Credit: 2 semester-hours

DEPARTMENT OF INDUSTRIAL ARTS EDUCATION

Graduate work in the Department of Industrial Arts Education is designed to help teachers of industrial arts (1) to become more proficient in teaching through study of recent trends and new developments in the field, (2) to improve organization of the industrial arts laboratory, and (3) to provide a basis for work in supervision and administration. Advanced work in industrial arts and related areas which will meet needs and broaden professional experiences of industrial arts teachers is emphasized.

An undergraduate major as established by the State Board of Education is a prerequisite for matriculation as a candidate for the degree. Individuals who have an undergraduate major in this area, but who do not wish to work toward a degree, may enroll in graduate courses in the department with the consent of the adviser.

GRADUATE PROGRAM OF STUDIES
MASTER OF ARTS DEGREE IN INDUSTRIAL ARTS
EDUCATION

I. <i>Basic Professional Course Requirements</i>	S. H.
A. Ed. 503. <i>Methods and Instruments of Research</i> (Mathematics 400, <i>Educational Statistics</i> , is a prerequisite for Education 503.)	2
B. Each student with the approval of his adviser selects four more semester-hours of education credit. (Two 500-level courses for two semester-hours each—preferably in the areas of administration, curriculum, guidance, or supervision.)	4
Total	6
II. <i>Industrial Arts Requirements</i>	
A. Each student, with the approval of his adviser, selects eighteen semester-hours of departmental work.	
Ind. Arts 501. <i>Curriculum Construction and Course Organization in Industrial Arts Education</i> —2 semester-hours	
Ind. Arts 502. <i>Shop Planning and Equipment Selection in Industrial Arts Education</i> —2 semester-hours	
Ind. Arts 503. <i>Problems in Teaching Industrial Arts</i> —2 semester-hours	
Ind. Arts 508. <i>Survey of Industrial Arts Literature</i> —2 semester-hours	
Ind. Arts 511. <i>Supervision of Industrial Arts</i> —2 semester-hours	
Ind. Arts 601. <i>Seminar in Industrial Arts Problem Solving Approach to Teaching</i> —4 semester-hours	
Ind. Arts 602. <i>Seminar in Research and Experimentation in Industrial Arts Education</i> —4 semester-hours	
Total	18

If the candidate chooses to develop a thesis, creative project, or field study, as a part of, or following research in EDUCATION 503 and INDUSTRIAL ARTS 602, a departmental sponsor is appointed. The "Regulations of Research and Thesis Requirements" are followed in the completion and acceptance of the thesis. Credit for such a project is to the extent of four semester-hours.

- B. All candidates are required to submit a finished copy of their EDUCATION 503, *Methods and Instruments of Research*, paper to the Chairman of the Industrial Arts Department.

III. Electives

The candidate may select, after consultation with his adviser, courses to round out his background. Candidates are urged to explore the offerings in other departments and select as widely as possible in those areas not represented in undergraduate study.

Total 8

Comprehensive Examination

Each candidate who does not choose to develop a thesis, creative project, or field study, must pass a written comprehensive examination before the degree is awarded. The examination is given during the spring semester each year. Students desiring to take the examination should notify the Graduate Office prior to the beginning of the spring semester. They are then notified of the date and provided with general information pertaining to the examination.

Grand Total 32

GRADUATE COURSES

INDUSTRIAL ARTS 501. *Curriculum Construction and Course Organization in Industrial Arts Education*

Curriculum construction techniques used in developing a program of industrial arts are studied. Special emphasis is placed on the development of industrial arts courses of studies and instructional materials.

Credit: 2 semester-hours

INDUSTRIAL ARTS 502. *Shop Planning and Equipment Selection in Industrial Arts Education*

Principles of planning and equipment selection for modern industrial arts laboratories are stressed. The practical application includes architectural aspects, floor plan layouts, equipment selection, bid preparations, and construction of scaled laboratory models.

Credit: 2 semester-hours

INDUSTRIAL ARTS 503. *Problems in Teaching Industrial Arts*

Problems which teachers encounter in the industrial arts laboratory are analyzed. Individual and group reports are prepared, discussed, and evaluated in an effort to gain a better insight into these problems.

Credit: 2 semester-hours

INDUSTRIAL ARTS 508. *Survey of Industrial Arts Literature*

Published material related to industrial arts is surveyed to determine its applicability to laboratory teaching and professional improvement. This includes historical writings on the development of industry and industrial education, research literature in the field, published materials provided by corporations and government agencies, and pertinent reference works, handbooks, and periodicals.

Credit: 2 semester-hours

INDUSTRIAL ARTS 511. *Supervision of Industrial Arts*

Principles and practices of supervision, as related to the modern industrial arts laboratory are discussed and evaluated. Special attention is given to supervisory techniques, budget supplies, inventories, maintenance, safety, and upgrading of in-service teachers.

Credit: 2 semester-hours

INDUSTRIAL ARTS 601. *Seminar in Industrial Arts Problem-Solving Approach to Teaching*

Students study the various techniques used in the problem-solving approach to teaching. Opportunity to plan and develop units as well as teaching materials based on this approach are evolved individually or by the group method.

Prerequisite: EDUCATION 503, *Methods and Instruments of Research*

Credit: 4 semester-hours

INDUSTRIAL ARTS 602. *Seminar in Research and Experimentation in Industrial Arts Education*

Each individual is required to select a research problem which can be explored in the industrial arts laboratory. The purpose is to plan an experimental project, select the needed materials, organize the procedure, construct the necessary testing equipment, conduct the experiment, and record the findings.

This departmental research course meets the research requirement for EDUCATION 603, *Principles and Practices of Research*.

Prerequisite: EDUCATION 503, *Methods and Instruments of Research*

Credit: 4 semester-hours

SENIOR-GRADUATE COURSES

The following courses are not required for the Master's degree in Industrial Arts Education. With the approval of the Chairman of the Department, they may be used as elective credits.

INDUSTRIAL ARTS 401. *Comprehensive General Shop for Elementary and Junior High Schools*

Laboratory experiences are geared to the principles and philosophy of the general shop at the elementary and junior high levels. Students plan and develop educational experiences which are related to the everyday living of both boys and girls.

Credit: 4 semester-hours

INDUSTRIAL ARTS 402. *Comprehensive General Shop for Senior High School*

Students are encouraged to develop new skills or perfect those already developed in the numerous technical areas in the general shop on the high school level. Instructional materials and individual and group educational experiences are planned and developed.

Credit: 4 semester-hours

INDUSTRIAL ARTS 407. *Field Studies of Industry*

A broad range of industrial firms are visited for purposes of noting and evaluating the processes used, the materials employed, the working conditions instituted, and the labor relations practiced. Every attempt is made to visit representative industries in the metropolitan area.

Credit: 4 semester-hours

INDUSTRIAL ARTS 411. *Industrial Photographic Techniques*

Photographic techniques in industry are reviewed in this laboratory course. Tools, materials, and equipment are used and evaluated in

connection with a variety of experiences in industrial photography and a consideration of recent developments in this field.

Credit: 2 semester-hours

INDUSTRIAL ARTS 421. *Jewelry Making and Lapidary*

Through laboratory experiences students have the opportunity to develop lapidary and jewelry-making skills. They cast, form, and design pieces in silver, gold, and other metals. The lapidary experiences cultivate skills in sawing, shaping, polishing, and mounting of stones to exhibit their desirable qualities.

Credit: 2 semester-hours

INDUSTRIAL ARTS 431. *Advanced Electronics*

The students develop an understanding of alternating current and direct current principles and their application in electronics. Students construct and trouble shoot radio and television circuitry using a variety of test instruments.

Credit: 2 semester-hours

INDUSTRIAL ARTS 442. *Conservation of Basic Industrial Materials*

Students, while living for ten days at the New Jersey State School of Conservation, Stokes State Forest, study the origin, development, use and consumption of basic materials as they exist in nature, by taking field trips to resources and industries, by employing a variety of instructional aids, and by talking with specialists in each specific area.

Credit: 2 semester-hours

INDUSTRIAL ARTS 443. *The Use and Processing of Basic Industrial Materials by Modern Industry*

Students live for ten days at the New Jersey State School of Conservation, Stokes State Forest. Study is devoted to recognition, use, and processing of basic natural materials, such as ores, wood, fuels, and agricultural products to improve their value as industrial materials, such as leather and plastics. The course is developed through the use of films, field trips, and discussion with industry specialists.

Credit: 2 semester-hours

DEPARTMENT OF MATHEMATICS

The graduate courses in mathematics are designed to meet the needs of teachers in service. There is opportunity for further study in pure mathematics, in applied mathematics, and in the teaching and supervision of mathematics. The courses in pure mathematics are designed to extend the student's knowledge of subject matter and to provide him with the background needed for teaching adequately in both traditional and experimental programs at the junior and senior high school levels. The courses in applied mathematics show the applications of mathematics in related areas of the physical, biological, and social sciences. The courses in teaching and supervision give attention to the current problems and proposals in mathematics education, the organization and construction of course syllabi, and administrative problems.

A candidate for the Master of Arts Degree in Mathematics should consult the Graduate Advisor of the Mathematics Department before matriculation, since the choice of graduate courses should be adjusted to the preparation acquired in undergraduate work. The student's work program, for a minimum of thirty-two semester-hours of work, is prepared in consultation with the Graduate Advisor. Any changes in the work program are made only with the written approval of that advisor.

REQUIREMENTS FOR THE MASTER'S DEGREE IN MATHEMATICS

I. *Prerequisites*

- A. The candidate for the A.M. degree must present an undergraduate major of at least *thirty semester-hours of mathematics*. Any deficiencies must be made up prior to conferment of the degree. This must be done in courses approved by the Graduate Advisor. The minimum requirement in category III below applies only to students with adequate previous preparation.
- B. *A year of calculus is a minimum prerequisite for registration in pure mathematics courses.*

II. *Professional Education Requirements*

minimum: 6 semester-hours

- A. Each candidate must take EDUCATION 503, *Methods and Instruments of Research*. This course should be taken *no later than the second year* in which the student registers for courses, since it is a prerequisite to MATHEMATICS 640.

- B. Each candidate must elect an additional four semester-hours in Education courses. These must be approved in advance by the Graduate Advisor in Mathematics.

III. *Mathematics Requirements* minimum: 18 semester-hours

A. Pure Mathematics

Each candidate must take at least one course in each of the following sets:

1. MATHEMATICS 503 and 504.
2. MATHEMATICS 508, 532, and 533.
3. MATHEMATICS 523 and 524.
4. MATHEMATICS 407 and 415 *if* not taken in undergraduate work.
5. MATHEMATICS 512, 517, 518, 519, 522, 531 and courses on the 400 level approved by the Graduate Advisor.

B. Applied Mathematics

Each candidate must take at least two courses in this area. These courses include MATHEMATICS 513, 551, 552, 602A, B, and C, and 603A, B, and C.

C. Teaching and Supervision of Mathematics

1. Each candidate is required to take MATHEMATICS 640, *Research Seminar in Mathematics*. This must be taken after or concurrently with EDUCATION 503.
2. Each candidate must take at least one additional course in this area. These courses include MATHEMATICS 501, 506, 507, 529, 530.

IV. *Elective Courses* minimum: 8 semester-hours

With the approval of the Graduate Advisor, the student may elect from among Mathematics courses, Education courses, or other graduate courses.

V. *Departmental Examination*

A final examination in mathematics is given all candidates prior to the conferment of the degree. This examination is general in nature and is designed to test the candidate's maturity of thought in mathematics and mathematics education.

VI. *Thesis (Optional)*

After consultation with the Graduate Advisor of the Mathematics Department and under the sponsorship of a member of the mathematics faculty, the candidate may choose to develop a thesis giving the results of some study in the field of mathematics or mathematics education. In this case, the requirement of MATHEMATICS 640 may be waived. The thesis will count in lieu of four semester-hours of elective study.

GRADUATE COURSES

MATHEMATICS 501. *Administration and Supervision of Mathematics*

This course is concerned with the problems met in organizing and supervising the teaching of mathematics. The topics considered are the functions and qualifications of the supervisor of mathematics, in-service training of teachers, demonstration lessons, professional attitude and preparation of teachers, department meetings, selection of texts, current problems, research, and the basis for determining objectives.

Credit: 2 semester-hours

MATHEMATICS 503. *Foundations of Algebra*

Careful consideration is given to the fundamental concepts and postulates which form the foundation of algebra. The modern algebraic theories of groups, rings, and number fields are introduced. The development of our number system, algebraic criteria for the possibility of geometric constructions, and the general theory and use of polynomial functions are considered.

Credit: 2 semester-hours

MATHEMATICS 504. *Modern Algebra*

Vectors and vector spaces are introduced as generalizations of numbers and number systems. Particular attention is also given to matrices, determinants, and linear dependence. Applications are considered.

Prerequisite: MATHEMATICS 503 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 506. *Principles of Teaching Secondary School Mathematics*

The primary purpose of this course is to relate recent psychological research into the learning process to the presentation of specific areas of secondary-school mathematics. Among the topics considered are: motivation, concept formation, drill, transfer of training, problem solving, and provisions for individual differences.

Credit: 2 semester-hours

MATHEMATICS 507. *The Teaching of General Mathematics*

This course is concerned with mathematics programs for the non-college-bound high-school student. Reports and recommendations from curriculum studies are examined. Among the topics considered are: characteristics of non-academic students, consumer mathematics, remedial arithmetic, preparation and use of resource materials, and classroom teaching techniques.

Credit: 2 semester-hours

MATHEMATICS 508. *Foundations of Geometry*

The elements of geometry include the logical foundations of geometry, finite projective geometries, construction of rational points on a line and on a plane, and topology. The emphasis is on the mathematical prerequisites for understanding contemporary proposals for secondary-school geometry.

Credit: 2 semester-hours

MATHEMATICS 512. *Numerical Analysis*

This course deals with the determination of functions from observed experimental data. Among the topics considered are: finite differences, symbolic operators, differencing, interpolation formulae, the method of least squares, and harmonic analysis. The course is designed to show the nature of mathematics as an applied science.

Credit: 2 semester-hours

MATHEMATICS 513. *Computer Programming*

This course is concerned with the elementary mathematics of computer programming. The use of machines by high-school students and the development of simple codes are considered.

Credit: 2 semester-hours

MATHEMATICS 517. *The Theory of Numbers*

This course offers a systematic treatment of certain fundamental properties of numbers along with a discussion of their historical background. It includes such topics as: properties of integers; Euclid's algorithm; prime numbers; factorization; perfect numbers; linear indeterminate and Diophantine problems; properties of congruences and their solutions; fundamental theorems of Euler, Fermat, Wilson, and others; and quadratic residues.

Credit: 2 semester-hours

MATHEMATICS 518. *The Theory of Functions of Real Variables*

The fundamental properties of real numbers and the elementary properties of functions of real variables are systematically developed. Among the topics considered are: continuity, differentiability, integrability, algebraic and transcendental functions, hyperbolic functions, and infinite series.

Prerequisite: MATHEMATICS 407 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 519. *The Theory of Functions of Complex Variables*

The fundamental properties of complex numbers and the elementary properties of functions of complex variables are developed. These include the properties of mappings, line integrals, Cauchy-Goursat Theorem, and conformal mapping. The practical applications of the theory are stressed by the use of illustrative examples.

Prerequisite: MATHEMATICS 407 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 522. *Introduction to Probability and Statistics*

The primary objective of the course is to give at least a minimum preparation in probability and statistics for the topics that are included in the newer high-school program. Topics include: the summarization of data, intuitive probability, axiomatic development of probability, the Binomial and Poisson distributions, the normal curve distribution, elements of sampling and elements of testing hypotheses. Both the experimental and the axiomatic approach to this material are studied. An examination of currently available material is included. This course is not open to students who have received credit for MATHEMATICS 307 or 408.

Credit: 2 semester-hours

MATHEMATICS 523. *The Theory of Probability*

This course develops the formal mathematical theory of probability and also describes the empirical background. In addition a variety of applications in both physical and social sciences are developed. Topics include: historical background; sample space; elements of combinatorial analysis; Binomial, Poisson, and Hypergeometric distributions; normal distribution; mathematical expectation; random walk; and ruin problems.

Credit: 2 semester-hours

MATHEMATICS 524. *Statistical Inference and Sampling Theory*

In this course the student considers the planning and execution of a statistical study. Among the topics considered are: problems in descriptive statistics, discrete and continuous distributions, elements of sampling theory, tests of hypotheses, power functions of statistical tests, analysis of variance and covariance, statistical control, statistical efficiency, and nonparametric statistics. Applications are given to industrial, scientific, and social problems.

Prerequisite: MATHEMATICS 307, 408, or 522

Credit: 2 semester-hours

MATHEMATICS 529. *Curriculum Construction in Mathematics*

This course is concerned with the implications and classroom implementation of contemporary recommendations for college preparatory curriculums in secondary-school mathematics.

Credit: 2 semester-hours

MATHEMATICS 530. *Mathematics Materials for the Teacher of Mathematics*

This course is concerned with the adaptation and use of materials to motivate and improve the teaching of high-school mathematics. Particular attention is given to the equipment needed for a modern mathematics laboratory; to the effective use of such equipment; to such visual aids as pictures, drawings, slides, motion pictures, and bulletin-board exhibits; and to books, periodicals, and pamphlets needed for the school and for the teacher's library. Material available for individual and club activities in mathematics is considered.

Credit: 2 semester-hours

MATHEMATICS 531. *Survey of Higher Mathematics*

This course is intended for students who have already taken several graduate courses in mathematics. The principal aim of the course is to provide these students with additional insight into the nature and content of the various fields of mathematics.

Credit: 2 semester-hours

MATHEMATICS 532. *Projective Geometry*

The methods of synthetic and analytic projective geometry are compared and used to emphasize the fundamental concepts of Euclidean

geometry. Emphasis is placed upon the dependence of many common properties and theorems of Euclidean geometry and upon the properties of lines, parallelism, perpendicularity, similarity of figures, and the definition of distance.

Prerequisite: MATHEMATICS 508 or permission of the instructor

Credit: 2 semester-hours

MATHEMATICS 533. *Non-Euclidean Geometry*

The development of Hyperbolic-Non-Euclidean and of Elliptic-Non-Euclidean geometry is carefully traced. A brief survey of the historical development of each is given. This course is designed for teachers and students of mathematics who desire a better perspective of the field of geometry.

Credit: 2 semester-hours

MATHEMATICS 551. *Mathematics of Social Sciences*

This course surveys the mathematics of economics, business, sociology, and psychology. The discussion includes such topics as: theory of investments, distribution of wealth and income, use of charts and graphs, business trends, and measurement and presentation of data in social sciences.

Credit: 2 semester-hours

MATHEMATICS 552. *Mathematics of Physical Sciences*

This course includes topics from physics; chemistry; and engineering. The chief purpose is to supply the teacher with background material that may be used to enrich the teaching of secondary-school mathematics.

Credit: 2 semester-hours

MATHEMATICS 602A, B, and C. *Workshop on Secondary School Mathematics*

These courses are conducted as workshops to provide teachers with increased insight into contemporary mathematics. The emphasis is upon mathematical principles and concepts. Topics are selected for their significance in revisions of secondary-school mathematics programs. The topics include: analysis of statements, sets, algebra of sets, foundations of algebra, probability, statistics, statistical inference, foundations of geometry, topology, and mathematics of the infinite.

Credit: 2 semester-hours each

MATHEMATICS 603A, B, and C. *Workshop on Junior High School Mathematics*

These courses provide the necessary mathematical background to understand and interpret current curriculum recommendations in the junior-high school. Areas covered include: structure of the number system, probability, foundations of algebra, and foundations of geometry, each of which is oriented for junior-high-school teachers. Current curriculum recommendations are examined.

Credit: 2 semester-hours each

MATHEMATICS 640. *Research Seminar in Mathematics*

This course is designed primarily for students who are fulfilling the College requirement of four semester-hours of research for candidates for the A.M. degree who matriculated after August 31, 1959. Candidates in mathematics select some problem of interest in either the subject matter or the teaching of mathematics for intensive study and research.

The student should register for EDUCATION 503 in the first semester of the year that he takes this seminar. He, thus, has the advantage of consultation with both research and mathematics advisers while conducting his investigation.

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

MATHEMATICS 405. *History of Mathematics*

This course surveys the history of elementary mathematics, through calculus, from ancient times to the present. Emphasis is on the major developments in the fields of arithmetic, algebra, and geometry and on contributions of leading mathematicians. The solution of mathematical problems in their historical context is an important part of the course. A by-product is the motivating effect of historical information on the teaching and learning of mathematics.

Credit: 2 semester-hours

MATHEMATICS 406. *Solid Analytic Geometry*

This course includes a study of the basic elements of three-dimensional analytic geometry along with reference to the extensions to n dimensions. Topics are: coordinates and graphs, vectors, planes and lines, applications of determinants and matrices, surfaces and curves, quadric surfaces and their classification, the general equation of the second degree, and coordinate and point transformations.

Credit: 2 semester-hours

MATHEMATICS 407. *Advanced Calculus*

The purposes of this course are twofold: fundamental notions of calculus, such as sequences, limits, differentiation, integration, the Generalized Theorem of the Mean, partial derivatives, multiple integrals, and infinite series are rigorously developed and examined; also, some extensions of these basic concepts are introduced. In this latter set are such topics as: line integrals through Green's Theorem, Fourier series, elliptic integrals, and gamma and beta functions.

Credit: 2 semester-hours

MATHEMATICS 409. *Introduction to Contemporary Mathematics*

The aim of this course is to develop the point of view of contemporary mathematics and to consider its potential influence upon secondary-school mathematics. Consideration is given to topics in professional literature for possible inclusion in secondary-school mathematics. Topics include sets, Boolean algebra, a modern concept of variable and function, a detailed study of sentences and statements, the use of symbolism and patterns in mathematics, linear pro-

gramming, and application of new mathematical techniques in social sciences.

Credit: 2 semester-hours

MATHEMATICS 410. *Mathematics of Finance*

This course introduces the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It discusses the mathematics of life insurance covering the following: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course gives a helpful background to the mathematics teacher and aids the student of economics and insurance.

Credit: 2 semester-hours

MATHEMATICS 411. *Elements of Mathematical Thought*

This course acquaints students having a limited background in mathematics with the logical structure of mathematics. There is an emphasis on postulational foundations and the reasoning process itself. Topics considered include: the nature of mathematical knowledge, the origin and influence of logical systems, essentials of logical reasoning, and examples of logical systems from algebra and geometry.

Undergraduate mathematics majors desiring to take this course must secure special permission.

Credit: 2 semester-hours

MATHEMATICS 412. *Modern Geometry*

This course is concerned with synthetic and coordinate methods in plane and solid geometry. It provides students who have not taken MATHEMATICS 301 with background for teaching secondary-school geometry. It is not open to students who have taken MATHEMATICS 301. The structure of high-school geometry and foundations of geometry are also considered with trends and proposals for secondary-school geometry.

Credit: 4 semester-hours

MATHEMATICS 415. *Differential Equations*

Applications of differential equations and their standard methods of solution are treated in this course. Topics are: linear differential equations of the first degree and of the first and higher orders, linear

equations of the n th order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximation, and series solutions.

Credit: 2 semester-hours

MATHEMATICS 453. *Differential Calculus*

Concepts of differential calculus are developed for science students who have taken one year of college mathematics. Topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. Applications are developed utilizing the scientific background of the students. Students credited with MATHEMATICS 201 may not take this for credit.

Credit: 3 semester-hours

MATHEMATICS 454. *Integral Calculus*

Concepts of integral calculus are developed for students who have completed MATHEMATICS 453 or equivalent. Topics include: integration procedures, solid analytic geometry, and geometrical and physical applications of the definite integral in two and three dimensional problems. Applications utilize the scientific background of the students. Students credited with MATHEMATICS 202 may not take this for credit.

Credit: 3 semester-hours

MATHEMATICS 480. *Elements of Logic*

This course develops an understanding of methods of reasoning used in the mathematical sciences. The point of view and elementary processes of symbolic logic are studied. Background materials are included for teaching of logical concepts in secondary schools.

Credit: 2 semester-hours

DEPARTMENT OF SCIENCE

The graduate program of the Science Department is designed to help the science teacher with the problem of maintaining his professional competence with respect to recent advances in the fields of science and science education.

Prior to matriculation in the Science Department for the Master of Arts degree the student should complete a subject matter background of at least twenty-four semester hours of college science. This undergraduate program must show breadth in the three areas of science, biology, chemistry, and physics, plus sufficient depth in at least one area to serve as a base for the graduate program. If the degree candidate does not meet these provisions, the graduate adviser in science may require that the six semester-hours of electives in the graduate program be taken in the major area.

In cases where there is a weak undergraduate program in the major field, prerequisite courses, not for graduate credit, may be assigned. In general, the assignment of elective hours to the major area would compensate for deficiencies in depth of preparation while prerequisite courses would compensate for deficiencies in breadth.

A minimum of eighteen semester-hours of graduate credit work in science is required. The student's work program is prepared in cooperation with the science adviser. Any changes in the student's work program are made only with the written approval of the science adviser.

COURSE REQUIREMENTS FOR THE A.M. DEGREE IN SCIENCE

I. *Education Requirements*

Each student must take EDUCATION 503, *Methods and Instruments of Research*, and four additional semester-hours in Education courses.

II. *Science Requirements*

A. The candidate must complete three four-semester-hour courses from among the following:

Biology 407, 408, 409, 410, 411, 415, 506, 509

Chemistry 407, 408, 411, 412, 508, 509, 510

Physics 402, 405, 406, 407, 408, 409, 411, 416, 510, 512

Science 405, 410, 421

12 semester-hours

B. The candidate may elect two to three semester-hours from among the following:

Biology 501, Chemistry 501, Science 401D, Physics 501

C. The candidate may elect up to six semester-hours from among the following:

Biology 412, 413, 414

Chemistry 413, 414

Physics 513

Science 409, 410, 411, 412, 413, 414, 415, 418, 419, 420

D. The candidate must complete the departmental research requirement by one of the two procedures below:

SCIENCE 505 *Research Seminar in Science* : 2 s. hrs.

or

GRADUATE 600 *Master's Thesis* 4 s. hrs.

If the candidate chooses to develop a thesis following completion of EDUCATION 503, a departmental sponsor is appointed and the "Regulations of Research and Thesis Requirements" are followed in completion and acceptance of the thesis. The preparation of such a dissertation does not relieve the candidate of any of the required work in science.

E. After consultation with his adviser, the candidate may elect from among science courses, education courses, or other courses on the 400-500 level.

Maximum possible for E—6 semester-hours

BIOLOGY

GRADUATE COURSES

BIOLOGY 501. *The Teaching of Biology in Secondary Schools*

This is a seminar and research course designed to give opportunity for study of the best methods and practices being used in the teaching of secondary school biology. Major topics of discussion are: aims of secondary school biology, course content, functions of textbooks, testing, laboratory exercises and demonstrations, and the collection and use of suitable and available laboratory materials. A study is made of recent research studies in the field of biology teaching.

Prerequisite: 16 semester-hours of work in biology

Credit: 3 semester-hours

BIOLOGY 506. *Histology and Histological Technique*

This course includes a study of the microscopic anatomy of living forms in order to bring about the fuller appreciations of their structure and function. The structural characteristics of cells and their specialization according to function are considered as well as the organization of this basic unit into the tissues and organs of the intact form.

The study of histological preparations during the laboratory period gives the student an opportunity to learn the characteristics of each tissue and organ. Basic procedures for the preparation of tissue sections and permanent mounts are covered.

Prerequisite: 8 semester hours of work in biology

Credit: 4 semester-hours

BIOLOGY 509. *Field Studies of Flowering Plants*

The emphasis of this course is placed upon the methods of identification of higher plants and the ecological factors affecting the growth and development of these plants. Plants in their winter conditions are considered first. As the season progresses, the emphasis changes from the identification of woody to herbaceous forms. Plant communities of various types are observed, and the factors influencing their development are discussed. Field trips are taken to such typical habitats as the Pine Barrens, Troy Meadows, and others.

Prerequisite: General botany

Credit: 4 semester-hours

SENIOR-GRADUATE COURSES

BIOLOGY 407. *Comparative Embryology*

A study is made of the stages in development and factors influencing the development of different animal types, particularly the vertebrates. Serial sections of entire chick embryos in different stages of development are prepared by individual students and used as a basis for the study of the development of tissues and organs of the animal. The details of the development of the mammal are based on the dissection of pig embryos.

Prerequisite: 8 semester-hours of work in zoology

Credit: 4 semester-hours

BIOLOGY 408. *Biological Technique*

This course is designed to furnish the teacher of biology with the technical details necessary to enable him to handle successfully biological materials and experiments and demonstrations in which these materials are employed. Students are trained in methods of collecting and preserving plants and animals for use in the classroom. Study is made of the proper methods of preparing illustrative materials with special emphasis laid upon the purpose of these materials.

Prerequisites: 8 semester-hours of work in zoology and 4 semester-hours of work in botany

Credit: 4 semester-hours

BIOLOGY 409. *Human Physiology*

A study is made of normal and abnormal physiology based on previous study of mammalian anatomy and histology. In addition to an analysis of the part played by organs and tissues in carrying out the essential functions of the body, special attention is given to problems of hygiene and sanitation. Applications of the above problems are made in reference to children of school age, and the physical condition of individual pupils is correlated with their behavior in the classroom.

Prerequisite: A course in vertebrate anatomy or BIOLOGY 402

Credit: 4 semester-hours

BIOLOGY 410. *Comparative Anatomy of the Vertebrata*

This course deals with representative members of the phylum chordata. The prochordata are considered briefly. Representative

species of the cyclostomata, cartilaginous fish, bony fish, amphibia, reptiles, birds, and mammals are studied by means of dissections and demonstrations. Fundamental principles of the taxonomy, anatomy, physiology, and ecology are reviewed and amplified.

Credit: 4 semester-hours

BIOLOGY 411. *Elementary Bacteriology*

This course covers the morphological and biochemical characteristics of bacteria, yeasts, fungi, and protozoa. Major topics include: history of microbiology, classification and naming, the physiology of microorganisms, microbiologic techniques and methods, useful activities of microorganisms, microbiology of sewage and water, microbiology of foods, infection and body defenses and infectious diseases.

Prerequisites: BIOLOGY 101, 102, 201, and 202

Credit: 4 semester-hours

BIOLOGY 412. *Genetics*

This course considers the scientific basis of the gene concept and its support in experiments from Mendel's work to the present. Documents of some of the milestones in the history of the science are studied. The wide uses of the science in plant and animal improvement and the discoveries related to man's heredity make an integral part of the study.

Prerequisite: An elementary college course in biology

Credit: 2 semester-hours

BIOLOGY 413. *Economic Botany*

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim of this course. The economic importance of bacteria, fungi, and other lower plants is considered as well as that of the seed plants.

Credit: 2 semester-hours

BIOLOGY 414. *Field Ornithology*

This course deals primarily with the identification and natural history of birds. A variety of habitats is visited so that one can become acquainted with the habits and requirements of this unusually well-

adapted vertebrate type. Migration, ecological relationships, and other problems are considered.

Prerequisite: A year of biology or the equivalent

Credit: 2 semester-hours

BIOLOGY 415. *Entomology*

This course is designed to give an overview of the fundamental aspects of entomology. The major emphasis is on understanding basic principles which are of physiological and ecological significance. A survey is made of the common insect orders and families. Attention is given to economic importance of insects. Laboratory work includes a study of gross and microscopic morphology and identification of major groups of insects by the manipulation of keys.

Prerequisites: BIOLOGY 201 and 202

Credit: 4 semester-hours

CHEMISTRY

GRADUATE COURSES

CHEMISTRY 501. *The Teaching of Chemistry in Secondary Schools*

A study is made of the objectives, recent trends, methods of presentation, courses of study, lesson planning, instructional aids, and subject matter of high school chemistry.

Prerequisite: 16 semester-hours in chemistry

Credit: 3 semester-hours

CHEMISTRY 508. *Biochemistry*

In this course a study is made of the composition of living organisms, their nutritional requirements, their mechanism for promoting and regulating chemical action, and their metabolism of foods. A laboratory study is made of the components of foods, enzyme action, isolation of proteins, etc., blood and urine analysis.

Prerequisites: CHEMISTRY 405 and 406, organic chemistry

Credit: 4 semester-hours

CHEMISTRY 509. *Advanced Inorganic Chemistry*

This course offers opportunity for intensive and systematic study of the elements in the light of the periodic classification. Selected theories and principles of inorganic chemistry and some of their applications are studied in detail. A study is made of types of compounds. Directed use of chemical literature is an important part of this course. Individual experimental work in the laboratory consists chiefly of preparation and purification of inorganic compounds and testing for impurities in the products.

Prerequisite: CHEMISTRY 101-102

Credit: 4 semester-hours

CHEMISTRY 510. *Food Inspection and Analysis*

A study is made of the composition of commercial food products, the laws governing purity and marketing of foods, methods of analysis of foods. Laboratory work is an extension of chemical and microscopic analysis to provide application of various analytical methods. Methods of extraction; detection of adulterants, preservatives, coloring; estimation of carbohydrates, fats, proteins, minerals, and vitamins are included in the laboratory work of the course.

Prerequisites: Organic chemistry and quantitative analysis

Credit: 4 semester-hours

SENIOR-GRADUATE COURSES**CHEMISTRY 407.** *Advanced Quantitative Analysis*

This course is adapted to the needs and preparation of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colorimetric methods; use of organic reagents in analyses; electrometric titrations; conductimetric titrations; spectrographic methods of analysis; electrodeposition of metals; and special methods of analysis.

Prerequisites: General college physics and one semester of quantitative analysis, or special permission of the instructor

Credit: 4 semester-hours

CHEMISTRY 408A. *Industrial Chemistry, Part I*

A survey is made by lectures, reports, and trips to plants of the chemical industries in the State. This section of the course stresses the importance and the characteristics of chemical industry, the

various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 408B. *Industrial Chemistry, Part II*

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in CHEMISTRY 408A. Also, a study is made of the economics of chemical industry, chemistry and industry in general, and the effects of chemical discoveries upon living conditions.

Prerequisites: General and organic chemistry, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 411. *Physical Chemistry, Part I*

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermochemistry, and homogeneous and heterogeneous equilibria.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 412. *Physical Chemistry, Part II*

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radio-activity.

Prerequisites: General college chemistry, analytical chemistry, and general college physics

Credit: 4 semester-hours

CHEMISTRY 413. *Atomic Structure and Atomic Energy*

Some of the topics studied include the following: discoveries leading to knowledge of the structure of the atom; bonding; geometry and structure; isotopes; nuclear fission; nuclear reactions; chemical

versus atomic explosions; the chain-reacting pile; production of plutonium; detection and measurement of nuclear radiation; atomic energy for peace-time uses; radioactive isotopes in agricultural, biological, and chemical research; and availability of materials for atomic energy.

Prerequisites: General college chemistry and general college physics, or special permission of the instructor

Credit: 2 semester-hours

CHEMISTRY 414. *Introduction to Radiochemistry*

This course is an introduction to the use of radioisotope experiments for the chemistry curriculum. The course consists of lecture and laboratory work which covers such topics as detection instruments, counting techniques, sample preparation, radiochemical separations by co-precipitation, chelation, and ion-exchange techniques.

Prerequisites: General College Chemistry, General College Physics, or special permission of the instructor

Credit: 2 semester-hours

PHYSICS

GRADUATE COURSES

PHYSICS 501. *The Teaching of Physics in Secondary Schools*

A study is made of the objectives, methods, and techniques of presentation, courses of study, lesson planning, instructional aids, and subject matter of high-school physics. Attention is given to the recent trends in developing apparatus and other equipment suitable for teaching the principles of physics. Assignments are made from recent literature on the outcomes of teaching of physics by television and by other visual aids.

Prerequisites: Sixteen semester-hours of work in physics

Credit: 3 semester-hours

PHYSICS 510. *Advanced Problems in Photography*

This course is intended to meet the needs of the camera club teacher and the hobbyist. The course includes negative and positive alterations, toning, printing processes, studio portraits, color photography.

and photomicrography. The student is expected to submit prints of exhibition quality for public showing.

Prerequisites: General college physics, general college chemistry, and a first course in photography

Credit: 4 semester-hours

PHYSICS 512. *Modern Physics*

This course is a survey of recent experimental research in physics and of the newer theories concerning nuclear physics and electricity. Such topics as atomic spectra, radioactivity, artificial transmutation of the elements, and cosmic rays are discussed.

Prerequisites: General college physics, general college chemistry, and a course in electrical measurements

(No credit can be given for PHYSICS 512 if student has taken PHYSICS 415.)

Credit: 4 semester-hours

PHYSICS 513. *Nuclear Radiation*

A study of the nature of radiations is made. Particular attention is given to radiation measurement technique. The course is concluded with a study of health physics as related to radiation dosages and their effects. Some attention is paid to disposal of radioactive wastes, radiation protection, and safety precautions.

Prerequisites: General college physics, general college chemistry, and a course in electrical measurements

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

PHYSICS 402. *Magnetism and Electricity*

This course consists of lectures, demonstrations, reference readings, written and oral reports, laboratory experiments with modern electrical instruments, and construction of simple electrical devices. Some of the topics studied are: modern concepts of the electronic structure of matter, electric forces, magnetic fields, potential, resistance, impedance, capacitance, and characteristics of thermionic vacuum tubes.

Prerequisites: PHYSICS 101 and 102

Credit: 4 semester-hours

PHYSICS 405. *Light and Optical Instruments*

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light.

Prerequisites: General college physics and a course in electrical measurements

Credit: 4 semester-hours

PHYSICS 406. *Astronomy*

This is a basic course covering the fundamentals of astronomy—units, cosmology, cosmogony, stellar processes, tools and methods, the solar system, stellar processes, the universe, and relativity. One purpose of the course is to furnish a description of the physical universe in which its features are shown, and to put out external environment in proper perspective.

Prerequisites: General college chemistry and physics

Credit: 4 semester-hours

PHYSICS 407. *Aviation*

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, lift, drag, stability, motions of an airplane, piloting, motorless flight, aircraft

engines, power performance, types of propellers, engine instruments, and flight instruments.

Students who have taken PHYSICS 307 are not eligible to take this course.

Credit: 4 semester-hours

PHYSICS 408. *Advanced Aviation*

This course deals with the study of navigation; meteorology as applied to flight operations; radio communications; flight and navigational radio aids; instrument flight; air traffic control; jet, turbojet, and rocket flight; and recent advancements in aviation.

Prerequisite: PHYSICS 307 or PHYSICS 407

Credit: 2 semester-hours

PHYSICS 409. *Basic Electronics*

This is an introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube characteristics, vacuum tubes as circuit elements, and gaseous discharge. The use of transistors is also considered. Applications of electronics to instrumentation, radio, and television are introduced.

Prerequisites: General College Physics and Magnetism and Electricity

Credit: 4 semester-hours

PHYSICS 410. *Meteorology*

This course is designed to develop a fuller appreciation of our atmosphere with emphasis on the meteorological applications of physical principles. Consideration is given to weather elements; the temperature effects; air currents, air masses, and frosts; the collection, dissemination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment.

Credit: 2 semester-hours

PHYSICS 411. *Photography*

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on

physical principles in the construction of cameras, projection printers, tanks, and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction.

Prerequisites: General physics and general chemistry or permission of the instructor

Credit: 4 semester-hours

PHYSICS 416. *Introduction to Analytic Mechanics*

This course includes some detailed treatment of the physics of classical mechanics, of the kinematics and dynamics of particles, and the dynamics of rigid bodies. The necessary mathematical methods of handling the data and theory are introduced and developed along with the course material. The course consists of lectures, discussions, demonstrations of practical application, and problem solving.

Prerequisite: General College Physics

Credit: 4 semester-hours

SCIENCE

GRADUATE COURSES

SCIENCE 505. *Research Seminar in Science*

This course is designed to afford opportunity for graduate students in science, supervisors, and science teachers: (1) to investigate research in science education; (2) to organize science experiences and science information with the teaching materials for the public schools. Each member of the group selects a project. This project must be presented to the science faculty and graduate students for evaluation.

Prerequisites: Matriculation for A.M. degree in science, registered concurrently for EDUCATION 503, or special permission of the instructor

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

SCIENCE 401D. *The Teaching of Aviation in Secondary Schools*

This course covers the study of State aviation programs, texts, bulletins, free material for school use, demonstration equipment, tests, working models, visual aids, and references needed to teach aero-dynamics, aircraft engines, meteorology, navigation, and aircraft communication in high schools. Field trips to airports and aviation industries are included.

Credit: 2 semester-hours

SCIENCE 409. *Senior High School Physical Science Demonstrations*

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations for the teacher.

Credit: 2 semester-hours

SCIENCE 410. *Junior High School Science Demonstrations*

This course covers the methods of experimental instruction in grades seven, eight, and nine. A detailed study is made of about three hundred demonstrations.

Credit: 4 semester-hours

SCIENCE 413. *Field Studies in Science: Physical*

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

Credit: 2 semester-hours

SCIENCE 418. *Three Centuries of Science Progress*

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling

opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustment following the discoveries.

Credit: 2 semester-hours

SCIENCE 412. *Field Studies in Science: Biological*

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

Credit: 2 semester-hours

SCIENCE 414. *Conservation of Plants and Animals*

The social, economic, and ecological implications of plant and animal conservation are considered together in this course. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 415. *Conservation of Soil and Water*

The social, economic, and ecological implications of soil and water conservation are considered together in this course. Discussion periods are interspersed with field trips to selected areas. Outside experts bring special contributions in their fields. Visual aids are used extensively.

Credit: 2 semester-hours

SCIENCE 419. *Field Science and Conservation*

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

Credit: 2 semester-hours

SCIENCE 420. *Water Supply and Conservation Problems*

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, water-shed management, stream pollution, and soil erosion, gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects such as Incodel, Passaic Valley Flood Control, and Stoney Brook Water-shed are studied. Teaching materials are supplied, and methods of presenting this material to elementary and secondary pupils are demonstrated and discussed.

Credit: 3 semester-hours

SCIENCE 421. *Water Analysis and Purification*

This course covers the phases of water inspection, analysis, and purification of value in safeguarding public and private water supplies, and in securing potable water from questionable sources. The work consists of class discussions, field trips, and laboratory experiences. Field trips are to water purification plants, sewage disposal plants, and board-of-health laboratories. The laboratory work is divided between the fields of chemical and bacteriological analysis of water. The necessary bacteriological background is developed in the course. Chemical analysis includes tests for harmful impurities and hardness.

Prerequisites: CHEMISTRY 101 and 102

Credit: 4 semester-hours

COURSES OFFERED AT THE NEW JERSEY STATE SCHOOL
OF CONSERVATIONSCIENCE 405. *Field and Laboratory Studies in Science*

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common but possibly unstudied features of the landscape; *e.g.*, soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and

laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning purposes, the making of ecological maps and illustrating them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course.

Prerequisite: Proficiency in biology and chemistry

Credit: 4 semester-hours

SCIENCE 411. *Problems in Field Studies in Science*

In this course each student selects a phase of field science in which he does advanced research under the guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose.

Prerequisites: Field Studies in Science or its equivalent plus at least 12 points of biology

Credit: 2 semester-hours

DEPARTMENT OF SOCIAL STUDIES

The teacher of social studies works in a field the boundaries of which are constantly changing and expanding. The necessity for constant study, especially with regard to the contemporary social situation and its problems; presses upon every secondary school teacher of the social studies. The Social Studies Department at Montclair intends to provide for such teachers courses of an advanced character which will help to keep them abreast of the changes in a changing society and a complex world. It also provides advanced courses for those teachers who wish to increase their preparedness in specialized secondary school subjects. Finally, it aims to provide for the teacher-in-service an opportunity for keeping informed concerning the changing techniques and problems of teaching the social studies. Selections from advanced courses of the sort just described lead to the Master's degree in the social studies.

In order to qualify for the Master's degree in social studies, candidates either prepare a thesis or pass an oral examination based upon a selected field of research.

REQUIREMENTS IN THE SOCIAL STUDIES DEPARTMENT

In general, a candidate must offer thirty-two hours of graduate credit, at least eighteen of which must be in the field of Social Studies, six in the field of Education, and six or eight (depending upon the number of social studies credits required) elective credits in fields closely related to the social studies. The following are the more specific requirements:

- I. All candidates *must* take the seminar course, SOCIAL STUDIES 600.
- II. The remaining social studies courses should represent a diversified choice from among the following fields:

Ancient and Medieval History

Social Studies 423, 425, 426, 427, 473

Modern European History

Social Studies 441, 457, 458, 493

United States History

Social Studies 408, 413, 419, 438, 447, 471, 474, 475, 480, 502, 518

The Americas

Social Studies 415, 435, 440, 453

Anthropology

Social Studies 445A, 445B, 540, 541A, 541B, 542

International Affairs

Social Studies 412, 432, 442, 451, 530

Economics

Social Studies 446, 450A, 450B, 456, 495, 517, 522, 523, 524, 525

Sociology

Social Studies 429, 439, 443, 476, 477, 482, 494, 512, 513

Political Science

Social Studies 402, 430, 433, 437, 515

Philosophy

Social Studies 404

Educational Techniques

Social Studies 503

Credits may also be chosen to the amount of six from the offerings in Field Studies.

III. All candidates must take the course, EDUCATION 503—*Methods and Instruments of Research*, and four elective credits in education selected in consultation with the Social Studies Department Chairman.

IV. Elective credits in fields other than the social studies should be selected in consultation with the Social Studies Department Chairman.

V. *Master's Thesis or Research Paper*

All candidates are required to complete either a Master's thesis or a Master's essay on a question or problem which has been chosen by the candidate and approved as a proper topic for his specialization. This project is generally initiated in the seminar course, SOCIAL STUDIES 600. The candidate is later given an oral examination on the paper before a seminar of members of the Social Studies Department. Complete directions for this requirement may be obtained from the Chairman of the Department.

In the case of candidates offering undergraduate majors from institutions other than Montclair, it may be necessary to make more specific requirements with respect to choices among social studies and elective credits than is indicated above in order to fill gaps which may exist in the undergraduate major.

GRADUATE COURSES

SOCIAL STUDIES 502. *The Origin and Development of the American Constitution*

This course is an intensive study of the origin and framing of the Constitution of the United States. It aims to search out the roots and influences that determined our basic political institutions. The seminar method is employed and attention is given to the techniques of historical research and historical writing.

Credit: 2 semester-hours

SOCIAL STUDIES 503. *Modern Social Studies Instruction and Supervision*

This course is designed primarily to assist teachers and supervisors to obtain a comprehensive view of recent curriculum trends, current subject-matter tendencies, professional literature, and problems of the teacher and the supervisor, and newer practices in secondary school social studies.

Credit: 2 semester-hours

SOCIAL STUDIES 512. *Social Legislation*

This course analyzes the social, economic, and political adjustments which have come about in our society due to technological progress.

Credit: 2 semester-hours

SOCIAL STUDIES 513. *Intercultural Relations*

This course is designed as a critical examination of the cultural reasons for many of the irritations which have created many of the tension points in the world today. It is designed to go beneath the historical causes for many of the problems around the world and to examine how subtle factors have been at work and how revolutionaries have made effective use of them to create tensions at various spots throughout the world. The course examines in detail the nature of these irritants and subtle forces in these tension spots and attempts to evaluate their effectiveness. It synthesizes anthropological, psychological, political, and historical findings from recent research in these fields.

Credit: 2 semester-hours

SOCIAL STUDIES 515. *History of Political Thought*

The major theories of representative political philosophers concerning the nature, functions, organization and sovereignty of the state are studied in this course. Among those discussed are: Plato, Aristotle, Cicero, Thomas Aquinas, Machiavelli, Luther, Calvin, Bodin, Hobbes, Locke, Spinoza, Montesquieu, Rousseau, Hume, Bentham, J. S. Mill, Burke, Hegel, Marx.

Credit: 2 semester-hours

SOCIAL STUDIES 517. *Money and Banking*

An opportunity is provided for an analysis of the monetary and banking principles and practices basic to modern economic organization. Special attention is directed to an examination of the functioning of the Federal Reserve System in relation to the gold standard, a managed currency, stability, inflation and deflation.

Credit: 2 semester-hours

SOCIAL STUDIES 518. *Recent Trends in American History (1918 to the Present)*

Without attempting to reach final conclusions, this course analyzes the major problems which have influenced American life since World War I. The new position of the nation in world affairs, the modifications of the old economic order, the progress of social and political change are all surveyed.

Credit: 2 semester-hours

SOCIAL STUDIES 522. *The Development of Economic Institutions and Ideas*

The doctrines of the more important schools of economic thought are emphasized, and the teachings of the Mercantilists, Physiocrats, Adam Smith, Malthus, Ricardo, Marx, Henry George, Veblen, Hobson, Commons, Keynes, and others are examined in relation to the important problems of money, credit, prices, business cycles, foreign and domestic commerce, property, wages, the nature of wealth and value, and economic planning.

Credit: 2 semester-hours

SOCIAL STUDIES 523. *The Economics of the Business Cycle*

The purpose of this course is to consider the nature of business cycles and their impact on the national economy, to survey business

cycle theories, and to analyze the significant proposed methods of control for the purpose of developing a desirable public program conducive to economic stability.

Credit: 2 semester-hours

SOCIAL STUDIES 524. *The Economics of Public Fiscal Policy*

Consideration is given to the various theories of justice in taxation: the incidence and shifting of the tax burden; the constitutional aspects of government finance; fiscal policy and full employment; taxation and economic inequality; the economics of public borrowing; and management of the national debt.

Credit: 2 semester-hours

SOCIAL STUDIES 525. *Workshop on Economic Education*

This workshop is designed to provide teachers, supervisors, and administrators with a better understanding of the American economy and its operation. Instruction is given by a staff of economists and curriculum specialists, supplemented by businessmen, labor leaders, and representatives of agricultural groups.

Credit: 3 semester-hours

SOCIAL STUDIES 535. *Russia in the Modern World*

Particular attention is devoted to the role played by the geographical and historical forces that have influenced Soviet foreign policy. The institutional apparatus is considered, with emphasis given to the special functions performed by such agencies as the press, the schools, and the agricultural collective. In appraising the development of Soviet foreign policy, the focus is on relations with the United States, the Soviet Union in the United Nations, and the emergence of Soviet interests in the Far East, the Middle East, and Africa.

Credit: 3 semester-hours

SOCIAL STUDIES 540. *Living Races: In the Company of Man*

This course presents a study of the physical anthropology of race: human origins; the history of racial evolution; and racial types in the modern world. The facts of race are utilized as the basis for studying race relations in contemporary society, as well as for clarifying misconceptions concerning race and intelligence, race and culture, and other related factors.

Credit: 2 semester-hours

SOCIAL STUDIES 541A. *Applied Anthropology and the Professions, Part I*

This course considers the selection and application of anthropological data for dealing with problems of contemporary life. Part I of the course presents a survey of applied anthropology *prior* to World War II. It includes consideration of early problems of theory and method in anthropology; the use of anthropology in colonial administration; and applications of anthropology in industry, Indian affairs, psychological warfare, and in the work of the United Nations.

Credit: 2 semester-hours

SOCIAL STUDIES 541B. *Applied Anthropology and the Professions, Part II*

This course presents a study of applied anthropology *since* World War II. Emphasis is placed upon the relevance today of anthropological knowledge in the professions; *e.g.*, the practical contributions of anthropology in the fields of education, human relations, health, technical assistance, and child growth and development. Problems of culture change, inter-cultural communication, cultural diversity in our schools, etc., are covered in workshop sessions utilizing school and community resources.

Credit: 2 semester-hours

SOCIAL STUDIES 542. *Africa, South of the Sahara*

The peoples and environment of Africa are studied as the basis for understanding changes taking place on the African continent today. Attention is focused on Africa's physical types, climate, history, and cultural traditions, with special emphasis being placed on culture contacts and change, and their effects on Africa, South of the Sahara.

Credit: 2 semester-hours

SOCIAL STUDIES 600. *Social Studies Research Seminar*

This seminar course is designed primarily to provide an opportunity for graduate students in the social studies to investigate and apply the techniques of research in the social studies field. Each Master's Degree candidate has an opportunity to explore materials and select an appropriate research topic for intensive study. The completed project must be presented to the social studies faculty for final evaluation and official approval no later than two months prior to the expected date of graduation.

Credit: 2 semester-hours

SENIOR-GRADUATE COURSES

For more complete descriptions see the undergraduate catalog.

SOCIAL STUDIES 402. *Foreign Governments*

This course offers students an opportunity to study the political systems of the major world powers. In each instance, political institutions are viewed against their economic and social backgrounds. Frequent comparisons are drawn between the American federal government and the foreign governments considered in this course.

Credit: 3 semester-hours

SOCIAL STUDIES 404. *The Philosophy and Interpretations of History*

It is the purpose of this course to investigate the relation of history to the other social studies and also the major attempts to find the meaning of history. A brief survey is made of the leading interpretations of philosophies of history.

Credit: 2 semester-hours

SOCIAL STUDIES 408. *A History of New Jersey*

This course is designed to assist teachers in acquiring a better knowledge of their state. A study is made of the history of New Jersey from the point of view of the social, political, economic, and cultural development of the people from the beginning of the settlement to the present. Special attention is given to the geographical and industrial aspects of the state, and the place of New Jersey in the national setting.

Credit: 2 semester-hours

SOCIAL STUDIES 412. *International Government*

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international legislative, executive, administrative, and judicial problems are studied.

Credit: 3 semester-hours

SOCIAL STUDIES 413. *Economic History of the United States*

The trends and movements in agriculture, finance, commerce, manufacturing, transportation, community, and industrial relations are

traced from their beginnings in the colonial period to contemporary times.

Credit: 2 semester-hours

SOCIAL STUDIES 415. *Latin-American Relations of the United States*

This course aims to provide the information necessary for a clear understanding and intelligent appreciation of the political, economic, and social relations that have developed between the United States and its Latin-American neighbors. The Organization of American States and other international agencies are given particular attention.

Credit: 3 semester-hours

SOCIAL STUDIES 417 and 418. *Seminar in American Government*

The content of this course is based upon the 160 telecasts of the "Continental Classroom" credit course in American Government. The course deals with the structure and functioning of government and how the United States government makes and executes policy. Weekly discussions include the content of the telecasts and the supplementary readings. An analysis of content to be presented to high school students is made. The course meets once weekly for two class hours. Each student must view these telecasts as part of the course requirements. The course follows the outline of the "Continental Classroom" telecasts. The discussion period with the instructors deals with the application of the material in the telecasts.

Credit: 3 semester-hours

SOCIAL STUDIES 419. *American Political Biography*

This is the study of the life and influence of the leading figures in American political and social history. It is the aim here to show the relation of each of these characters to the times in which he lived and to point out how he influenced the trend of American life. The study includes such leaders as Washington, Jefferson, Hamilton, Webster, Lincoln, Cleveland, T. Roosevelt, Wilson, and others.

Credit: 2 semester-hours

SOCIAL STUDIES 423. *Roman Civilization*

This course traces the social changes in Rome from the earliest times to the end of the Western Roman Empire. Attention is directed to the earliest features of Roman civilization and to the

changes—political, social, and economic—resulting from Etruscan, Carthaginian, and Greek influences.

Credit: 2 semester-hours

SOCIAL STUDIES 426. *Medieval History to 1498*

A study is made of the factors contributing to the political breakdown of the Imperial principle, the blending of Barbaric Cultures with that of the Roman, resulting in Feudalism as a way of life. Political movements, medieval commerce, guilds, the growth of towns and cultural changes are traced.

Credit: 2 semester-hours

SOCIAL STUDIES 427. *Ancient History to 378, A.D.*

The first part of this course covers the Oriental period and the Greek through the Periclean Age. Detailed study is given the Egyptian, Babylonian, and Hittite cultures, and Athenian democracy and imperialism. The second covers the Hellenistic period from the rise of Philip of Macedon, stressing attempts at federalism. It also covers Roman history, placing emphasis on republican forms and imperial experiments in governmental organization and control.

Credit: 4 semester-hours

SOCIAL STUDIES 429. *Present-Day Social Problems*

Beginning with a survey of levels of living in the United States and their relation to the distribution of wealth and income, this course proceeds with a study of poverty and crime, their sources, treatment, and prevention.

Credit: 2 semester-hours

SOCIAL STUDIES 430. *The Citizen and the State*

The emphasis is placed on government and political organizations, but the course also includes a study of the many other organizations of the community, the county, and the state that have to do with directing policy and maintaining controls. The aim of the course is to encourage intelligent appreciation and participation rather than simply to accumulate academic information.

Credit: 2 semester-hours

SOCIAL STUDIES 432. *The Twentieth Century World*

This course is designed to emphasize a topical consideration of significant movements, events, and personalities of the Twentieth

Century. Trends and topics to be studied include an historical background of the major political "isms" of the period, scientific and technological advances, social forces, economic theories and experiments. Considerable thought is given to specific contemporary problems facing the world, especially those emerging nations of Asia, Africa, and South America.

Credit: 2 semester-hours

SOCIAL STUDIES 433. *American Political Thought*

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

Credit: 2 semester-hours

SOCIAL STUDIES 435. *Early Development of Latin America*

This course deals with Latin America from the pre-Columbian era to the end of the wars of independence. Stress is placed upon the geographical background, and the development of the Maya, Inca, and Aztec civilizations. After considering the Spanish and Portuguese backgrounds of the Latin-American people, consideration is given to the European cultures established in the New World.

Credit: 3 semester-hours

SOCIAL STUDIES 437. *The Political Party System in the United States*

Among the topics discussed are: party organization, the political boss, the political machine, party finances, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the development of the party system, sectional politics, the farm vote, the labor vote, and the future of party government in the United States.

Credit: 2 semester-hours

SOCIAL STUDIES 438. *The Literature of American History*

The purpose of this course is to familiarize the student with the writings and sources of United States history. Social, economic, political, geographic, and other interpretations are studied and compared. The writings of a selected group of representative American historians are examined.

Credit: 2 semester-hours

SOCIAL STUDIES 439. *The Family and Its Problems*

This course gives a history of the family, our American family patterns, the effects of social change, marital patterns of interaction, social roles, sources of conflicts and frustrations, divorce and desertion, special problems in family life, economics of children and the home, social legislation pertaining to family problems, marital adjustments, personality change after marriage, parent-child relationships, and personality reorientation.

Credit: 2 semester-hours

SOCIAL STUDIES 440. *Modern Latin America*

This course is designed to give an understanding of the economic, social, and political character of contemporary Latin-America. This may be considered as an area study in that geographical factors are given great emphasis, along with political considerations. The history of these nations from their wars of independence to the present serves as background for the present state of affairs in this region.

Credit: 3 semester-hours

SOCIAL STUDIES 441. *Economic History of Europe*

The study of Europe from an economic point of view is particularly important in the light of present European problems and their relation to world-wide conditions. This course is a survey of the economic life and development of Europe from the emergence of the ancient civilizations to the beginning of the modern economic world.

Credit: 2 semester-hours

SOCIAL STUDIES 442. *The Far East*

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the historical background of China and Japan, and of our relations with the Philippines. Oriental folkways, religion, education, population shifts, and strategic questions are discussed. This course provides an approach to the problems the United States must face in the Far East.

Credit: 3 semester-hours

SOCIAL STUDIES 443. *Youth and the Community*

This course is a sociological study of youth in its many relations to the community. Special attention is given to problems which arise in the relationship of youth and the community; *e.g.*, juvenile delin-

quency, conditions contributing to maladjustment, poorly adjusted children, and educational and social agencies active in solving youth behavior.

Credit: 2 semester-hours

SOCIAL STUDIES 445A. *Introduction to Anthropology*

This course provides an introduction to anthropology as a field of knowledge. It surveys the biological background of culture; the pre-historic development of culture; the culture concept; and the universals of culture—i.e., material culture, social and political organization, education, religion, language, and art and play.

Credit: 2 semester-hours

SOCIAL STUDIES 445B. *Introduction to Anthropology*

This course is a continuation of the study of anthropology as a field of knowledge. Among the topics considered are cultural variability; the cultural backgrounds of personality development; the life crises; the dynamics of culture change; and cultural perspectives in the modern world. A brief review of basic concepts is included for students new to the study of anthropology.

Credit: 2 semester-hours

SOCIAL STUDIES 446. *Current Problems in Economics and Government*

This course is designed to analyze the relationship of economics to government. The causes and results of governmental activity are discussed in the light of their economic significance and their bearing on public welfare.

Credit: 2 semester-hours

SOCIAL STUDIES 447. *Diplomatic History of the United States*

The purpose of this course is to show how we have become gradually conscious of our world interests and responsibilities, and the important role we have come to play in international politics. The growing concept of world democracy as opposed to commercial and military imperialism is stressed.

Credit: 2 semester-hours

SOCIAL STUDIES 448. *Cultural Diversity*

The study of primitive and folk cultures is seen in contemporary perspective. The purpose of this course is to increase student aware-

ness of the range and variety of cultures in today's world, and to improve understanding of factors which account for cultural diversity and variability.

Credit: 2 semester-hours

SOCIAL STUDIES 450A. *Modern Economic Problems and Policies, I*

The purpose of this course is to contribute to the general need for increased knowledge in the area of economic relationship, using the problem-approach method of analysis. 450A begins with a brief recapitulation of the over-all functioning of the economic system, after which the class proceeds to a detailed study of our broader economic problems and the public policies relating to them.

Credit: 2 semester-hours

SOCIAL STUDIES 450B. *Modern Economic Problems and Policies, II*

450B considers those problems associated with the world economy, international trade and exchange, monopoly and its regulations, the problems concerned with the control of public utilities, emergency price regulation and economic stabilization, labor problems, the problems of public finance, the public debt and fiscal policy, and finally, the nature of comparative economic systems and their relations with each other.

Credit: 2 semester-hours

SOCIAL STUDIES 451. *The Middle East*

This course is a survey of Indian and Moslem civilization. It shows that economic and political changes alone do not suffice to adjust the peoples of the Middle East to Twentieth-Century civilization, and that many cultural traditions must vanish while some forgotten features of the past are to be revived. Post-war planning for the region from the Near East through Persia, India, Burma, Thailand, and Malaya to the Netherland East Indies is discussed.

Credit: 3 semester-hours

SOCIAL STUDIES 453. *The Development of Canada*

This course deals with the historical background, geographical environment, governmental organization, economic behavior, and social structure of the northern neighbor of the United States. Its professional objective is to provide the understanding and appreciation necessary to students interested in the development of the Dominion

of Canada. The relationships between Canada and the United States and Canada and the British Commonwealth of Nations are stressed in this course.

Credit: 3 semester-hours

SOCIAL STUDIES 456. *International Economic Relations*

This course considers the significance of international trade and exchange to the economic life of our nation and the world economy. An analysis of the contrasting economic philosophies relating to international economic organization is made. Special emphasis is given to those policies which tend to promote freer trade, including classical doctrine of comparative costs, the Reciprocal Trade Ageements Act, and the International Bank and Currency Stabilization Fund.

Credit: 2 semester-hours

SOCIAL STUDIES 457. *Development of Russia*

Factors which shaped the Russian people are emphasized. An account is presented of Soviet internal organization, Sovkhoz, Kolkhoz, and the Five-Year plans. In addition to the historical background, Russia's great writers are discussed in the light of social and political developments.

Credit: 2 semester-hours

SOCIAL STUDIES 458. *Russia as a World Power*

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin, and Stalin is described. The changing views of the Second and Third Internationals, and the organization and methods of the Comintern are discussed.

Credit: 2 semester-hours

SOCIAL STUDIES 471. *The United States Since World War I*

The course presents an overview of the significant developments, economic, social, cultural, scientific, political, intellectual and international, that have characterized our national scene since World War I.

Credit: 2 semester-hours

SOCIAL STUDIES 473. *The Arts in Western Civilization*

This course is designed to examine how various developments in fine arts, the opera, the drama, and literature are but reflections of the major developments in the history of Western Europe. The presentation includes an examination of various historical themes or events and how the arts reflect or have treated them. It is also designed for those who wish to break across traditional discipline lines and enrich their backgrounds and information in all of these areas by showing their inter-relationships.

Credit: 2 semester-hours

SOCIAL STUDIES 474. *America in Transition*

This course surveys rapidly the results of the Civil War and then emphasizes the major trends, economic and social, which have made modern America. It is intended as a more advanced study than that which is made in the undergraduate course. The period covered is from 1867 to around 1914.

Credit: 2 semester-hours

SOCIAL STUDIES 475. *The History of American Thought*

This course considers the influential thinking in America to understand how uncertain ideas or trends of thought have grown out of situations and have in turn helped to mould the course of our history. The writings and discourses of important American thinkers are considered including Mather, Paine, Jefferson, Emerson, Thoreau, and Veblen.

Credit: 2 semester-hours

SOCIAL STUDIES 476. *Personality Development and Group Relations*

A study is made of personality growth through social contacts, the environmental factors found in the home and family, neighborhood, play, and school groups. Methods of measuring the place of the individual in the group, analysis of the group process, ways of bringing about better life adjustment, and integrating experiences are the subject matter of the course.

Credit: 2 semester-hours

SOCIAL STUDIES 477. *Rural Sociology*

During this course the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings,

county fairs, rural dances and parties, and to live for a day or two with a farm family.

Credit: 2 semester-hours

SOCIAL STUDIES 480. *Social History of the United States*

This course presents a study of the social and cultural aspects of American history. As such, it supplements but does not take the place of economic and political history. The course considers population movements and growth, rural and urban social problems, status of women, family life, utopian ventures, mass media of communication, amusements and recreation, and human rights.

Credit: 2 semester-hours

SOCIAL STUDIES 482. *Conservation and Rural Economic Life*

This course provides for a study of one of the basic economic problems in America today. Land use, farm loans, price support of farm products, increased acreage production, conservation practices, are among the topics studied to give the student a better understanding of the relationship between rural and urban living.

Credit: 2 semester-hours

SOCIAL STUDIES 483. *Modern Approaches to Social Problems*

This course is designed to acquaint students with techniques and practices developed in recent years for a scientific approach to problems of human relationship. Techniques to be studied include: sampling techniques for testing large groups, questionnaires, interviewing techniques, objective observation of cultural patterns, objective observation in control laboratory situations, sociometrics, role-playing techniques, attitude testing, and use of semantic analysis in test construction.

Prerequisite: An introductory course in sociology or special permission of the instructor

Credit: 2 semester-hours

SOCIAL STUDIES 493. *Western Europe Since World War I*

This course presents an outline of the rise of communism and facism and the reaction of western democracies to these movements. The Civil War in Spain, the Munich Pact, the failure of the League of Nations, diplomatic events of the World War II era, United Nations problems, the North Atlantic Pact, and special problems of western

defense are emphasized. An evaluation of western Europe's significance for the United States is attempted.

Credit: 4 semester-hours

SOCIAL STUDIES 494. *Social Studies and Conservation*

Everyday problems of living as they are related to and affected by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the non-renewable resources, minerals, oil, and coal. Economic, social, community, national, and individual problems are approached by giving the student firsthand experiences gained through extensive field trips in northern New Jersey. This course is of particular interest to social studies and elementary school teachers but also forms an excellent experience background for all educational fields. Methods of teaching, courses of study, and teaching units are developed.

Credit: 2 semester-hours

SOCIAL STUDIES 495. *History of Economic Thought and Development*

This course examines and compares the economic development of Western Europe since 1500 and Soviet Russia since 1917. Theories of economic development are considered concurrently. An attempt is also made to relate these theories, and the experiences of the European and Soviet type of economic systems, to problems confronting underdeveloped areas of the world in the Twentieth Century.

Credit: 2 semester-hours

FIELD STUDIES IN AMERICAN LIFE

SOCIAL STUDIES 460. *Central Eastern Region*

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states.

Credit: 3 semester-hours

SOCIAL STUDIES 461. *New England and French Canada*

This field-study course gives an opportunity to study by direct observation the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels.

Credit: 3 semester-hours

SOCIAL STUDIES 462. *Continental United States*

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. All important geographic and historical features are studied under the instruction of members of the college faculty and local specialists.

Credit: 10 semester-hours

SOCIAL STUDIES 466. *Puerto Rico and the Virgin Islands*

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes an exploration of San Juan and its vicinity, including the University, the rain forest and the submarine gardens, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rum producing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air.

Credit: 2 semester-hours

SOCIAL STUDIES 467. *Florida*

This is a field-study course covering the Florida peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa; and the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies.

Credit: 2 semester-hours

SOCIAL STUDIES 469. *Mexico*

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic,

and cultural and artistic setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Pueblo, Oaxaca, Guadalupe, Querterro, Guanajuato, Patzcuavo, San Miguel de Allende, San Jose, Purua, Morelia, Toluca, Taxco, and Cuernavaca.

Credit: 3 semester-hours

SOCIAL STUDIES 481. *The West Indies*

This course consists of ten days of directed travel in countries in the Caribbean. Transportation is by air and private car. Opportunities are given for study of geographic, historic, economic, and cultural phenomena in Puerto Rico (one day), Santo Domingo (two days), Haiti (two days), Jamaica (two days), Cuba (two days), visiting San Juan, Ciudad Trujillo, San Cristobal, Port au Prince, Kenscoff, Kingston, Havana, and rural areas in all countries.

Credit: 2 semester-hours

SOCIAL STUDIES 484. *Gulf Coast and Lower Mississippi Valley*

This is a field-study course covering the Gulf Coast from Mobile to New Orleans. It surveys economic, geographic, and historical aspects of the lower Mississippi Valley. Some places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

Credit: 2 semester-hours

SOCIAL STUDIES 485. *Maritime Provinces of Canada*

This is a twenty-one day field-study course covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspé. The route runs through Vermont and Quebec to the Gaspé. The history of the conflicts between the French and the English for this territory, varied geographical and scenic phenomena, and customs and daily life of French Canadian and English-speaking people of the region are observed.

Credit: 3 semester-hours

SOCIAL STUDIES 486. *World Survey*

This is a thirty-five day field-study course planned to give the student a general comprehensive vision of the kind of a world we live in with its varying culture patterns and problems. The itinerary covers the Tokyo and Kamakura area in Japan; Manila and its environs in

the Philippines; Hong Kong, and the Kowloon Peninsula in south-east China; Bangkok in Thailand, Calcutta, Delhi, Agra and Bombay in India; Cairo and Memphis in Egypt; Jerusalem and Damascus in the Holy Land; Baalbeck and Beirut; Istanbul; Athens and Corinth; and Rome.

Credit: 4 semester-hours

SOCIAL STUDIES 487. *Field Studies in the Arts: European Civilization*

This field-study course gives an opportunity to study by direct observation the development of European culture from ancient Greco-Roman civilization to modern times. It deals with Byzantine, Romanesque, Gothic, Renaissance, Baroque, and Rococo architecture and art and changes in art forms to modern times. The spectacular rise of European music since the Renaissance forms an important part of this study. The close relationship between the arts and historical and social changes in European civilization is examined.

Credit: 6 semester-hours

SOCIAL STUDIES 488. *Hawaii*

This is a twenty-day field-study course. It covers the islands of Oahu, Hawaii, Maui, and Kauai and investigates all of the major geographic, historic, economic, and cultural features of the islands. Among the high points are Honolulu and its environs.

Credit: 3 semester-hours

BACKGROUND STUDIES IN AMERICAN LIFE

SOCIAL STUDIES 492A and B. *Studies in American Life—The East and the West*

These courses comprise a unit dealing with the United States as a cultural, historic, geographic, economic, social, and political unit and, at the same time, an appreciation of regional differences which characterize American unity and diversity.

The subject matter of SOCIAL STUDIES 492A covers New England, the Central East, the South, and the Middle West east of the Mississippi River. The subject matter of SOCIAL STUDIES 492B deals with the regions west of the Mississippi.

Credit: 2 semester-hours

THE DEPARTMENT OF SPEECH

Speech education in the schools of New Jersey has received increasing recognition in recent years with the conviction that effective oral communication is important to the achievement of self-realization, vocational competency, social effectiveness, and good citizenship. Additional programs of speech are being established to provide developmental and corrective work according to each student's needs. The effectiveness of these programs depends upon the sound and extensive preparation of master teachers who can organize and supervise speech programs and who can offer dynamic leadership in helping to integrate the speech program in the over-all school curriculum.

The graduate program in speech allows qualified students to specialize in one of two areas of speech education: speech and dramatics, or speech and hearing rehabilitation.

It is expected that each graduate student will have at least one of the following goals for his work:

1. To be the director or supervisor of a speech education program in the elementary and secondary schools of a community.
2. To be further qualified as a speech therapist in schools and special institutions.
3. To increase his skill as a teacher of speech and dramatics in secondary schools.
4. To provide opportunities for the completion of requirements for certification in the state and in the national professional organization, the American Speech and Hearing Association.

In order to matriculate as a candidate for the Master of Arts degree in Speech, the applicant must have completed a minimum of eighteen semester-hours of course work, or the equivalent, from among the following areas:

Voice production; fundamentals of speech

Phonetics

Speech correction; speech pathology

Anatomy and physiology of the vocal and auditory mechanisms

Speech laboratory practice; clinical practicum in speech

Oral interpretation; choral speaking

Public speaking; group discussion

Theater Arts

Each student must also be capable of setting a good example of acceptable speech. Each candidate will be interviewed by a speech faculty committee; and if any speech deficiencies are noted, the

candidate must correct them prior to matriculation, or accept matriculation on the condition that such correction will be made one year before the granting of the degree.

REQUIREMENTS FOR THE A.M. DEGREE IN SPEECH

Upon admission to the graduate program in speech, the student must declare his area of specialization: (1) speech and dramatics, or (2) speech and hearing rehabilitation. Each student must spend at least one summer in full-time study in the seminar course in his area of specialization.

I. <i>Professional Education Requirements</i>		S. H.
Education 503. <i>Methods and Instruments of Research</i>		2
Other education courses—to be chosen by the student in consultation with his adviser		4
Total		6
II. <i>Required of All Speech Majors</i>		
Speech 550. <i>Advanced Study of Voice and Speech Production</i>		3
Speech 592. <i>Areas and Techniques of Research in Speech and Dramatics</i> (3)		
or		3
Speech 593. <i>Areas and Techniques of Research in Speech and Hearing Rehabilitation</i> (3)		
Total		6
III. <i>Areas of Specialization</i>		
A. <i>For Students Specializing in Speech and Dramatics</i>		
Speech 567. <i>Seminar in Dramatic Production</i>		6
Speech 449. <i>Advanced Public Speaking</i> —2 s. hrs.		
or		2 or 3
Speech 462. <i>Group Discussion and Leadership</i> —3 s. hrs.		
Speech 565. <i>Advanced Oral Interpretation</i>		2
One course in speech and hearing rehabilitation		2 or 3
Electives (Chosen by the student in consultation with his adviser.)		6 to 8
Total		20
or		
B. <i>For Students Specializing in Speech and Hearing Rehabilitation</i>		
Speech 535. <i>Seminar in Speech and Language Rehabilitation</i>		6
One course in audiology		2 or 3
Speech 411. <i>Advanced Speech Pathology</i> —3 s. hrs.		
or		3
Speech 412. <i>Speech Diagnosis</i> —3 s. hrs.		
One course in speech arts		2 or 3
Electives (Chosen by the student in consultation with his adviser.)		5 to 7
Total		20
Grand Total		32

IV. *Additional Requirements*

- A. Written comprehensive examination
- B. Oral comprehensive examination
- C. Oral demonstration of communication skill—The speech faculty will arrange a committee to observe each candidate as he participates in a professional activity or program of at least thirty minutes in length. The nature, time, and place of the activity will be of the student's choosing, prior to his final semester. It may be in the form of a speech at a Parent-Teacher Association meeting or at a professional convention, a reading, a dramatization, or any combination which demonstrates the candidate's ability to exemplify good speech, and to be effective before an audience.

GRADUATE COURSES

SPEECH 522. *Advanced Phonetics*

Skill in the use of phonetics is developed further in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English, and sounds in foreign languages. Additional study is devoted to the stress, phrasing, and intonation patterns used in speaking English, with some analysis made of these elements in other languages.

Prerequisite: SPEECH 104 or equivalent

Credit: 2 semester-hours

SPEECH 531. *Advanced Audiology*

The purpose of this course is to increase skill in administering tests for determining pure-frequency and speech reception thresholds. Emphasis is placed on evaluation and interpretation of test results and on the analysis of client histories. Principles and techniques of hearing aid evaluation, measurement of recruitment, and tests for psychogenic deafness and malingering are studied. Consideration is also given to pre and post-surgical audiometry, and to the special problems of differential diagnosis in testing children.

Prerequisite: SPEECH 468 or a basic audiology course

Credit: 3 semester-hours

SPEECH 532. *Practicum in Speech Rehabilitation*

This course provides advanced students with the opportunities for the practical application of diagnostic and rehabilitative techniques with children and adults who have major speech and language

problems. Qualified students participate in specialized laboratory experiences which include planning and supervising speech therapy sessions, providing rehabilitative services to individuals and small groups, interviewing applicants, and administering audiometric tests.

Prerequisite: 60 clinical hours in speech practicum

Credit: 2 semester-hours

SPEECH 533. *Supervising Speech Correction Programs*

Methods of organization and administration of the speech correction and improvement programs are discussed. Emphasis is placed upon problems of screening, referral, speech-staff training and orientation, in-service courses, parent and community relations, integration with other disciplines, and development of new materials for testing, teaching, and evaluating.

Credit: 2 semester-hours

SPEECH 534. *Advanced Anatomy and Physiology of the Vocal and Auditory Mechanisms*

The basic anatomy of the mechanisms of speech reception and expression is reviewed. Consideration is also given to the integrated functioning of the central nervous system, the automatic nervous system, and the endocrine system. The effects of abnormalities of structure and function of the speech and hearing processes are emphasized. Discussion includes the medical and surgical aspects of rehabilitation, and the hygiene of the ear, nose, and throat. Demonstrations and supervised laboratory dissections are included.

Prerequisite: SPEECH 208 or equivalent

Credit: 3 semester-hours

SPEECH 535. *Seminar in Speech and Language Rehabilitation*

Graduate speech majors specializing in the speech sciences are required to devote one summer session to the study of speech and language disorders and to participate in the therapy program of the Speech and Hearing Center. Emphasis is placed upon the diagnostic, therapeutic, and evaluative techniques employed in working with children and adults who have speech disorders of organic etiology. A minimum of 135 clock hours of supervised teaching must be accumulated.

Prerequisite: SPEECH 410 or equivalent

Credit: 6 semester-hours

SPEECH 550. *Advanced Study of Voice and Speech Production*

The study is made of materials and methods used in the teaching of speech fundamentals on the junior high and senior high school levels. Review and further application of basic subject matter, including English and comparative phonetics, are stressed. Opportunities are provided for practice in improving or further developing personal voice and speech skills, in directing the practice of students with minor speech difficulties, and in phonetically transcribing speech from phonograph records or tape recordings. Some consideration is given to methods of helping students, for whom English is not a native language, to improve their voice and speech.

Prerequisite: SPEECH 100D or SPEECH 103 or equivalent

Credit: 3 semester-hours

SPEECH 563. *Scenery Design and Construction*

This course is designed to extend the advanced-speech student's knowledge in scenery design and construction techniques. Special emphasis is placed upon stage design as related to the play, the director, and the audience. The course of study includes a survey of the styles of design and the use of the perspective sketch and stage model in planning the stage setting. The application of stage construction techniques is used to demonstrate the necessity of scene design in planning the stage production. Each student is expected to design and plan the construction of scenery for a play appropriate for production in a secondary school.

Credit: 3 semester-hours

SPEECH 564. *History of the Theater*

This course is designed to give the advanced speech student a comprehensive view of the development of the theater from the Classic Greek drama through the Nineteenth Century. Special attention is placed upon plays and playwrights of the period, theater architecture, scenery, costuming, and styles of acting and presentation of each period. Course work includes oral reports, lectures, and classroom demonstrations. Advanced students may enroll with the consent of the instructor.

Credit: 2 semester-hours

SPEECH 565. *Advanced Oral Interpretation*

This course is designed to provide further study of techniques in interpretation of poetry and prose. Extensive practice is provided in

the analysis, presentation and of various types of literary material (short story, ballad, narrative, sonnet, etc.) suitable for use in the classroom and for special programs.

Prerequisite: SPEECH 106 or equivalent

Credit: 2 semester-hours

SPEECH 566. *Costume and Make-up for the Stage*

This course provides the advanced student with opportunities to design costumes and make-up for plays of various periods. Consideration is given to the use of materials, colors, and textures in achieving desired effects on the stage. Laboratory work in stage make-up is provided to develop skill in creating suitable visual characterizations.

Credit: 3 semester-hours

SPEECH 567. *Seminar in Dramatic Production*

This seminar is for advanced play-production students. It allows each member of the class to pursue projects in keeping with his own needs or interests in either the technical or directorial aspects of play production. When possible, supervisory assignments are made in connection with the current program of plays. The seminar meets four hours daily for individual project or laboratory activities, for evaluation of specific teaching problems in connection with the current plays, and for group analysis of typical production problems. Enrollment is open to matriculated graduate students in speech, or by permission of the instructor.

Credit: 6 semester-hours

SPEECH 590. *Problems in the Teaching of Speech*

This course is designed to present an analysis and investigation of the problems encountered in the speech classroom, and to survey the textbooks and teaching aids available to the teacher of speech on various grade levels. Consideration is also given to the problems of (1) motivation, (2) methodology, (3) evaluation procedures, and (4) co-curricular speech activities.

Credit: 3 semester-hours

SPEECH 591. *Organization and Administration of the School Speech Program*

This course deals with the problems of organizing and administering a comprehensive speech program in a school system. Consideration

is given to curriculum development, teacher-administration relationships, class scheduling, reports and records, in-service training, and integration of the speech program in the total school curriculum.

Credit: 2 semester-hours

SPEECH 592. *Areas and Techniques of Research in Speech and Dramatics*

Methods of research appropriate for studies in speech and dramatics are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research in speech and dramatics. Each student is required to prepare an outline for a research project and to develop a bibliography for the study.

Credit: 3 semester-hours

SPEECH 593. *Areas and Techniques of Research in Speech and Hearing Rehabilitation*

Methods of research appropriate for studies in speech and hearing are analyzed. Significant problems in the field are investigated and discussed, and published research projects are evaluated. Special attention is given to the problems of locating and utilizing professional journals and other publications for research in speech and hearing. Each student is required to prepare an outline for a research project and to develop a bibliography for the study.

Credit: 3 semester-hours

SENIOR-GRADUATE COURSES

SPEECH 410. *Speech Pathology*

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances including severe stuttering, dysphonia, laryngectomy, cleft palate, cerebral palsy, and aphasia. Emphasis is placed upon diagnosis, evaluation, and rehabilitation.

Credit: 2 semester-hours

SPEECH 411. *Advanced Speech Pathology*

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers.

Prerequisite: SPEECH 410 or equivalent

Credit: 3 semester-hours

SPEECH 412. *Speech Diagnosis*

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology to be used in providing speech rehabilitation services to children and adults with speech and language disorders is evolved.

Prerequisite: SPEECH 410 or equivalent

Credit: 3 semester-hours

SPEECH 435. *Stagecraft*

This workshop course provides training in constructing and painting of scenery, and lighting the stage. A minimum of twelve clock hours in the scene shop is required.

Credit: 2 semester-hours

SPEECH 436. *Fundamentals of Stage Lighting*

The purpose of the course is to analyze the functions of light on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the Memorial Auditorium at the College, which houses modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditoriums in which they may work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course.

Prerequisite: SPEECH 105A or SPEECH 435 or permission of the instructor

Credit: 3 semester-hours

SPEECH 437A. *Dramatic Production Workshop*

This course is designed for those students desiring a comprehensive introduction course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. The course may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a prerequisite to matriculation for the Master's degree in speech.

Credit: 2 semester-hours

SPEECH 437B. *Advanced Dramatic Production Workshop*

This course is a continuation of SPEECH 437A.

Credit: 2 semester-hours

SPEECH 438. *Creative Dramatics*

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts in the total educational picture. Student participation in planning and presenting demonstrations with children is an essential part of the course.

Credit: 2 semester-hours

SPEECH 439. *Workshop in Speech Correction*

This course is especially designed for students who wish to fulfill certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in speech. Specialized areas in the speech sciences are offered on a workshop basis requiring attendance during all or part of the six-week summer session, depending upon the number of units elected.

Part I**SPEECH 439A. *Phonetics***

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

Credit: 2 semester-hours

Part II**SPEECH 439B. *Anatomy and Physiology of the Auditory and Vocal Mechanisms***

The work of this course entails a detailed study of the larynx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

Credit: 2 semester-hours

Part III**SPEECH 439C. *Speech Pathology***

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

Credit: 3 semester-hours

Parts IV, V and VI**SPEECH 439D. *Practicum in Speech Correction*****SPEECH 439E. *Advanced Practicum in Speech Correction***

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain

experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units.

Credit: 1 semester-hour for SPEECH 439D

1 semester-hour for SPEECH 439E

SPEECH 439F. *Voice Disorders*

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized, and persons with cleft palate conditions are also discussed.

Credit: 2 semester-hours

SPEECH 448. *Choral Speaking*

In a speaking choir, students acquire skill in interpreting literature suitable for group practice. Consideration is given to their use in the various grade levels in teaching. Students prepare a group of selections for their particular interests and purpose.

Credit: 2 semester-hours

SPEECH 449. *Advanced Public Speaking*

This is an advanced course in the theory and practice of public speaking. It provides opportunities for further training in more complex speech skills, especially in persuasive speaking and conducting a meeting.

Prerequisite: SPEECH 204 or the equivalent

Credit: 2 semester-hours

SPEECH 456. *Play Direction*

This course covers choosing, casting, and directing plays. Scenes are directed for class criticism, and a detailed prompt-book of one play is prepared. Whenever possible, this play is given publicly before an audience. This course complements SPEECH 435.

Credit: 2 semester-hours

SPEECH 457. *Directing the Assembly Program*

It is the purpose of this course to prepare students to organize and to conduct assembly programs and similar activities. Class lectures and discussions cover all phases of the director's responsibilities. Groups conduct research on suitable program materials and share their findings. Each student prepares a detailed script for an assembly or commencement program, or a comprehensive set of notes and materials.

Credit: 2 semester-hours

SPEECH 461A. *Practicum in Speech Correction, I*

Remedial speech laboratories are maintained at the College as a community service so that students may apply their knowledge of diagnostic, remedial, and evaluative techniques in a professional laboratory experience. Students assist staff members in demonstrations, prepare lesson plans for individual and group speech therapy, and teach under supervision.

Credit: 2 semester-hours

SPEECH 461B. *Practicum in Speech Correction, II*

Opportunities for clinical experience are provided at a hospital with children and adults who have speech and hearing problems. Provisions are made for qualified students to participate in specialized laboratory experiences which include audiometric testing, planning and carrying out therapy sessions with individual patients, and attending seminars at which physicians and other hospital personnel discuss medical, psychological, and social aspects of rehabilitation. This course is made possible through an affiliation with the Department of Physical Medicine and Rehabilitation at Mountainside Hospital in Montclair.

Credit: 2 semester-hours

SPEECH 461C. *Advanced Practicum in Speech and Hearing*

This course provides further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audiometric tests and speech diagnostic examinations; (2) work with parents of children who have speech disorders; and (3) assist the beginning student-speech therapist in planning and carrying out therapy sessions.

Prerequisite: SPEECH 461A and B

Credit: 2 semester-hours

SPEECH 462. *Group Discussion and Leadership*

The purpose of this course is to study the principles of democratic discussion and the methods employed in guiding and participating in the informal group discussion, and in the panel, symposium, lecture, and debate forum. Parliamentary procedure is considered. Opportunities in the application of principles and methods studied are given through student participation in discussion programs dealing with community and national problems. Attention is also given to the ways in which group discussion may be used as an effective teaching method in the general school curriculum.

Credit: 3 semester-hours

SPEECH 463. *Audio-Visual Aids in Teaching Speech*

The aim of this course is to equip prospective teachers to understand the desirable characteristics; capabilities; and all possible uses of charts, models, projection equipment, and magnetic and disc recorders, available for the teaching of speech. The distribution, cost, operation, servicing, and storing of instruments and of supplies are also considered.

Credit: 2 semester-hours

SPEECH 464. *Psychology of Oral Communication*

This course deals with the development of speech and language in the individual, and the problems of communication that lead to confusion of meaning and misunderstanding. Consideration is given to the psychology of persons who are handicapped in speech, hearing, and/or reading, including hysterical or psychogenic impairments. The contributions of learning theory, psychoanalytic theory, and semantics to the field of communication are studied.

Credit: 2 semester-hours

SPEECH 468. *Measurement of Hearing*

A comprehensive study of the measurement of hearing is made in this course with attention given to the educational implications of impaired audition and deafness. A review of the physics of sound and the anatomy and physiology of the auditory mechanism is included. Emphasis is placed on principles and techniques of screening tests, interpretation of test results, and pure-tone and speech audiometry. Demonstrations and supervised practice are provided.

Credit: 3 semester-hours

SPEECH 469. *Auditory Rehabilitation*

The purpose of the course is to study the current theories and practices of teaching speech reading and auditory comprehension to hard-of-hearing children and adults. The educational problems of helping the student to gain proficiency in speech reading as a receptive language process are discussed. Principles of auditory training are studied as a means to help develop the use of residual hearing. Emphasis is placed on the ways in which speech reading and auditory comprehension supplement each other in the rehabilitation of the hard-of-hearing individual. Practical consideration is given to the preparation of lessons for the acoustically impaired at all grade levels.

Credit: 2 semester-hours

SPEECH 470. *Argumentation and Debate*

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentation techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

Credit: 3 semester-hours

SPEECH 471. *Advanced Acting*

Through three areas of activity this course aims to broaden the student's appreciation of the art of acting and to increase his own acting skill. This is accomplished through individual study of established actors and schools of acting, through critiques of current acting as observed by attending professional productions, and mainly through preparation of solo and group acting exercises, both original and from established dramatic literature. As far as possible, attention is paid to the student's future professional use of the material and exercises of the course.

Prerequisite: SPEECH 105B. *Introduction to Dramatic Production, II*, or its equivalent, with a grade of "B" or better, is prerequisite to the course, or the student must obtain permission of the instructor before registering

Credit: 2 semester-hours

SPEECH 472. *Voice Science*

The purposes of the course are: (1) to have the student make a careful analysis of his own vocal structure and vocal habits as applied to the basic aspects and factors of sound; (2) to analyze ineffective and effective voice, characteristics of pitch, volume, and quality and work for the elimination of unpleasant elements through intensive practice; and (3) to acquire and develop control of a pleasing speaking voice in various speaking and oral reading situations.

Prerequisite: SPEECH 100D

Credit: 2 semester-hours

SERVICE COURSES FOR NON-SPEECH MAJORS

The following courses may not be taken by speech majors. Students in other departments of the College may take them for graduate credit under certain conditions. Such students are advised to check with their advisers regarding enrolling in these courses.

SPEECH 454. *Training the Speaking Voice*

This is a course in the study of the problems of speech, the development of a pleasant speaking voice with precision in diction, and the application of speech skills to practical speaking situations.

Credit: 2 semester-hours

SPEECH 466. *Speech Development: Improvement and Re-education*

This course is intended for superintendents, principals, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found on the kindergarten, elementary, and secondary-school levels; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of setting up and integrating speech education in school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project.

Credit: 2 semester-hours

SPEECH 467. *Advanced Oral Interpretation*

This course is organized as a laboratory to help the teacher develop his potentialities in oral reading. Each student is given opportunities to read aloud and to participate in formal critiques. Assistance is given in compiling a repertory of selections most useful in daily teaching and co-curricular activities, such as, assembly programs and speech festivals.

Credit: 2 semester-hours

OTHER COURSES THAT MAY BE USED AS ELECTIVES

For more complete descriptions see the undergraduate catalog.

FINE ARTS COURSES

FINE ARTS 400. *Philosophy of Art*

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education.

Credit: 2 semester-hours

FINE ARTS 402. *Modern Philosophies of Art*

The work of the major writers in art in the Nineteenth and Twentieth Centuries is examined in this course. Exploration is made in the nature of the creative experience, the function of art in the life of the individual and of society, the nature of the creative process, the rise of new materials, and institutions and sentiments affecting current thinking in the field. Discussions are based on readings of philosophers, poets, social scientists, psychologists, and artists.

Credit: 2 semester-hours

FINE ARTS 409. *Industrial Design Laboratory*

A survey of the role and contribution of the industrial designer in contemporary American industry is made as an introduction to the area. This is followed by laboratory work which affords the student opportunity to solve problems in product development as they are approached by the industrial designer. Students, individually, or working as teams, consider form, function, materials, sales potential, and production problems in connection with the development of a product.

Credit: 2 semester-hours

FINE ARTS 415. *Designing in Native Materials*

In this course the student gains an appreciation and understanding of art expression growing out of the immediate environment as he

works creatively with native materials. A new respect for the potentials of raw earth products is discovered through art experiences in keeping with good conservation practices. Flower and plant arrangements for room and table decorations are studied. Digging for clay, hunting for wood, seeds, grasses, and experimenting with dyes become an exciting adventure.

Credit: 2 semester-hours

FINE ARTS 420A and 420 B. *Sculpture: General I and II*

This course provides the student with studio experiences in three dimensional expression. A variety of materials are explored including clay, plaster, metal, plastics, stone, and wood. Sculptural methods such as modeling, direct carving, construction, and casting are experienced. Special emphasis is placed on those materials and methods most applicable to the public school teaching program. In addition to the studio problems the student is required to complete text assignments and outside reading problems, make frequent museum and gallery visits, prepare written and oral reports on readings and visits, and spend additional time in designing.

Credit: 2 semester-hours each

FINE ARTS 425A and 425B. *Metalwork: General I and II*

This course introduces the student to the metals traditionally used in the shaping of useful articles and to the influence of both materials and construction on methods of design. It treats the relationships of structural and surface design as well as the techniques for developing both. It explores the role of the designer-craftsman in a technological society, the relationships of hand and machine arts, and the influence of the handicrafts on the development of taste. Research in these areas includes trips, reading, and discussion.

Credit: 2 semester-hours each

FINE ARTS 430. *Drafting and Woodwork*

This course is designed as an introduction to the basic processes in designing in wood with the use of hand and power tools. Drafting the designed pieces is integrated with the total designing process and includes the use of drawing instruments and the making of working drawings.

Credit: 2 semester-hours

FINE ARTS 435. *Costume Design*

A study of the elements of art as they determine the designing of the costume is the content of this course. Draping and construction in materials are the design approaches used to show the necessity of designing the costume in terms of the individual.

Credit: 2 semester-hours

FINE ARTS 440A and 440B. *Home Design and Community Planning, I and II*

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science, and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishings, model homes, well-planned communities are included in the course activities.

Credit: 2 semester-hours each

FINE ARTS 445. *Life Drawing*

This is a course in the study of the structure and proportions of the human form with emphasis on expressiveness of drawing.

Credit: 2 semester-hours

FINE ARTS 460A and 460B. *Photography: A Contemporary Art Form, I and II*

The content of the course is predominantly creative, using the technical materials as a medium of expression and experimentation. The work of leading contemporary artists using photography as an art medium is studied.

Credit: 2 semester-hours each

FINE ARTS 474A and 474B. *Arts and Crafts in Education, I and II*

Included in this course are workshop activities in the arts and crafts of the elementary and secondary school program. Painting, drawing, modeling, pottery, weaving, papier-mache, paper sculpture, school display techniques, lettering, wood, leather, plastics, metal work, and puppetry are materials and processes which are explored.

Credit: 2 semester-hours each

FINE ARTS 490. *Art of the Nineteenth Century*

This course explores the major art movements of the Nineteenth Century in terms of the rapid changes of social, political, and artistic personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and Post-Impressionists are discussed as well. The work of this period is studied through illustrated lectures, museum trips, readings, and discussion. The course is planned for both non-art and art majors.

Credit: 2 semester-hours

FINE ARTS 491. *Art of the Twentieth Century*

This is a course designed to survey through the use of visual materials such as slides, art films, and reproductions, and through discussion and studio participation, the major influences and trends in the development of painting, sculpture, and architecture of the Twentieth Century. It is planned for students who wish to enlarge their general education in art.

Credit: 2 semester-hours

FINE ARTS 493. *Masterpieces of World Art*

Designed for non-art majors this is an introductory course to the major art periods, movements, and works of art throughout the ages. Selected works of art from prehistoric periods, the ancient world, the Middle Ages, the Renaissance, the East, and the modern period, are studied in reference to their historical settings, the interests and ideals of their surrounding cultures, and the personality of the artist. Persistent and changing features and trends of great works of art and significant art movements are explored. The major works of art are studied through illustrated lectures, museum and gallery trips, readings and discussions.

Credit: 2 semester-hours

FINE ARTS 500. *Contemporary Art*

This course presents a survey of the major influences and trends in the development of painting, sculpture, and architecture of this century. The use of visual materials such as slides, art films, and reproductions supplement discussion and studio participation. This course is planned for students who wish to enlarge their general education in art and requires no technical competency. Not open to Fine Arts majors.

Credit: 3 semester-hours

FINE ARTS 505A and 505B. *Selected Problems in Art History, I and II*

This is a seminar course dealing with selected art problems of historic, social, and philosophical nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art, the rise of landscape painting, Impressionism in the East and West, historical views of art criticism, the self-portrait, Romanticism and Realism, art and society, the art market, the relation of painting and poetry, impact of Primitive Art on Modern Art, art and the sciences, and the rise of "Isms." Methods for dealing with selected topics include lectures, readings, reports, and discussion.

Credit: 2 semester-hours each

FINE ARTS 550A and 550B. *Print Making: Silk Screening I and II*

This course affords an opportunity to study and practice the graphic art techniques of silk screen from the creation of the master designs through the construction of necessary printing facilities and printing. Experiences include the use of tusche, glue, stencil lacquer, and photographic techniques.

Credit: 2 semester-hours each

FINE ARTS 551A and 551B. *Print Making: Intaglio Printing I and II*

This course is designed to enable the graduate student to acquire additional competency and depth of experience in etching, dry point, aquatint, and soft ground. Stress is on critical evaluation of design integrated with printing technique.

Credit: 2 semester-hours each

FINE ARTS 552A and 552B. *Print Making: Woodcut I and II*

This creative workshop course explores the fine art of woodcut, and its relation to painting in color, size, and richness. The cutting of various woods and veneers is fully demonstrated. Different approaches of printing and inventiveness in using other materials in relation to wood are fully explored. The course includes lectures on prints of the past, field trips to important print exhibitions, and an exhibition of student work.

Credit: 2 semester-hours each

FINE ARTS 553A and 553B. *Print Making: Lithography I and II*

This course is designed to provide opportunity for the student to acquire competency in the art of lithography. All steps from design and execution of master drawing to the finished print are covered. Studio experiences provide the student with first hand knowledge of tools, materials and techniques of the lithographic process. Adaptation of the lithographic phase of print making to classroom use is also studied.

Credit: 2 semester-hours each

FINE ARTS 561A and 561B. *Sculpture: Stone and Wood, I and II*

After preliminary exploration of the problems of carving in stone and wood, each student projects his work in consultation with the instructor.

Credit: 2 semester-hours each

GEOGRAPHY COURSES

GEOGRAPHY 503. *Economic Geography of the United States and Canada*

A study is made of the agricultural, industrial, and commercial development of the United States and of the geographic factors that have contributed to that development.

Credit: 2 semester-hours

GEOGRAPHY 504. *Economic Geography of Europe*

This course constitutes a study of the economic development of the nations of Europe in relation to the environmental background and resources that have made Europe one of the world's leading continents.

Credit: 2 semester-hours

GEOGRAPHY 509. *Economic Geography of Asia*

This course constitutes a treatment of the economic and commercial development of the countries of Asia in relation to their natural environment.

Credit: 2 semester-hours

GEOGRAPHY 405. *Urban Geography*

The student is introduced to the complex forces that have been and are responsible for the intense concentration of political, social, and economic activities within a small area. This area is then analyzed from the point of view of its evolution, morphology, and function. The changing characteristics of our cities, suburbanization, city-service areas, and city-hinterland interrelationships are also investigated. Special emphasis is placed upon research methods and source materials.

Credit: 3 semester-hours

GEOGRAPHY 406. *Geology*

This course deals with the earth and its geographic, stratigraphic, and structural development throughout geologic time; the record of the evolution of life as interpreted through a study of rocks and fossils.

Credit: 2 semester-hours

GEOGRAPHY 408A and 408B. *Political Geography*

This course deals with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustments between nations.

Credit: 2 semester-hours each

GEOGRAPHY 409. *Economic Geography of the British Isles*

A comprehensive treatment of the resources of the British Isles is given, and the influence of the natural environment upon the utilization of those resources in the economic, social, and political development of the British Empire is evaluated.

Credit: 2 semester-hours

GEOGRAPHY 410. *Economic Geography of Caribbean America*

This is a study and interpretation of the major and important minor economic areas of Caribbean America in relation to the natural environment. Attention is also given to the historical factors which have played a part in the economic and social life of the people.

Credit: 2 semester-hours

GEOGRAPHY 411. *Historical Geography of the United States*

This course provides an opportunity for students of history, geography, and related disciplines to become familiar with the major prin-

ciples of historical geography. It emphasizes the geographic factors pertinent to an understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Particular attention is paid to source materials, to the cartography of specific times, and to geographical lore and thought.

Credit: 3 semester-hours

GEOGRAPHY 412. *Geography of Africa*

This course includes a topical and regional study of Africa. Special emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined critically in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

Credit: 3 semester-hours

GEOGRAPHY 413. *Economic Geography of South America*

This course constitutes a study of the influence of the natural environment upon production and utilization of resources in the economic, social, and political development of the various nations of South America.

Credit: 2 semester-hours

GEOGRAPHY 414A and 414B. *Advanced Economic Geography*

This course is a study of the influence of the physical environment upon the production of, the trade in, and the utilization of the important agricultural, forest, mineral and sea products, and the manufactured commodities of the world.

Credit: 2 semester-hours each

GEOGRAPHY 416. *Conservation of Natural Resources*

This course provides an opportunity for students of the social and physical sciences to study the natural resources of the United States. Exploitation and conservation are both stressed. Our major resources are reviewed in terms of use, needs, and future developments. Consideration is given to the growth of legal and social awareness of the need for conservation practices in America.

Credit: 3 semester-hours

GEOGRAPHY 418. *Regional Geography of North America*

This course constitutes a detailed regional treatment of the continent of North America. Emphasis is placed upon the human activities of the various regions in relation to their natural environment and the relations of the regions to each other. Attention is given to the techniques of presenting the material and the use of geographic tools in the treatment of the subject-matter.

Credit: 2 semester-hours

GEOGRAPHY 419. *Geography of the Soviet Union*

This course is designed as a regional analysis of the Soviet Union. It examines critically the physical and human aspects of Soviet geography. Particular emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

Credit: 3 semester-hours

GEOGRAPHY 420. *Field Geography and Conservation*

This course constitutes a study of the relation between relief features of northern New Jersey, the location of natural resources, and the way in which land use and population distribution follow these patterns. Emphasis is given to the reading and interpretation of topographical maps and aerial photographs and to a study of the United States Geological and Soil Surveys of this region. By means of an actual land-use survey the student comes to appreciate the problems of conservation as they grow out of man's use of natural resources.

Credit: 2 semester-hours

GEOGRAPHY 421. *Population Problems of the World*

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

Credit: 3 semester-hours

GEOGRAPHY 422. *Geography of the American Indian*

This course is designed to survey the culture of the American Indian (from the Ice Age to the Reservation) in relation to his geographic

environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet for the first time, and culminates with discussion of the Indian problems of the present day. It serves to introduce the student to methods employed in interdisciplinary attacks upon cultural problems. The views of the geologist, archaeologist, cultural anthropologist, cultural historian, as well as the geographer are critically examined.

Credit: 3 semester-hours

GEOGRAPHY 423. *The Geography of Transportation*

An intensive examination of the principles of transportation geography is provided. The different methods of transportation are studied systematically with regard to their development and present-day role in regional development. The growth of international specialization and the resulting economic development are also considered.

Credit: 3 semester-hours

GEOGRAPHY 424. *Geography of New Jersey*

This course is a detailed topical and regional study of New Jersey. Physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relations with neighboring states are intensively studied. On the basis of the data thus examined an attempt is made to delineate the geographic regions of the state. Emphasis is placed throughout on the relationship between New Jersey's people and New Jersey's earth.

Credit: 3 semester-hours

GEOGRAPHY 425. *Geography of Exploration and Settlement*

This course is designed to survey the great age of exploration and settlement (1500-1900) of lands overseas inaugurated by the Columbian voyages. Its major themes are: knowledge concerning the lands of the earth, the unfolding of the world map, the type settlements erected by Europeans in distant lands. Special attention is given to motives for exploration, methods of navigation and travel, routes explored, and the cultural features marking European settlement.

Credit: 3 semester-hours

MUSIC COURSES

MUSIC 406. *Epochs in Musical Development, Part III*

This course is a continuation of MUSIC 208 and makes a study of the late romantic period and the rise of modern music. It includes a study of the music of Richard Strauss, Bruckner, Prokofieff, Mahler, Debussy, Tschaikowsky, Mussorgsky, Stravinsky, Schoenberg, Bartok, and Hindemith.

This course is professionalized for use in the teaching of music appreciation in the classroom.

Credit: 2 semester-hours

MUSIC 407. *The Development of the Opera*

This course deals with the origin, development, and characteristics of opera in the Italian, French, German, and Russian schools. Class analyses are made of representative operas of these schools. Special attention is given to building an ear repertory of operatic music heard over the radio.

Credit: 2 semester-hours

MUSIC 408. *Wagner Music Dramas*

This course deals with the operas and music dramas of Richard Wagner. It includes a study of Wagner's artistic ideals and their application to his compositions. Special attention is given to those works which have their sources in great literature, as the Ring of Nibelung, Parsifal, and Tristan and Isolde.

Credit: 2 semester-hours

MUSIC 413. *Masters of the Symphony*

This course helps to provide the student with an understanding and appreciation of the classic and romantic symphony through the study of the symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, and Brahms.

Credit: 2 semester-hours

MUSIC 425. *Music of the Romantic Period*

This course deals with the romantic spirit in music as expressed in the works of Schubert, Schumann, Mendelssohn, Chopin, Berlioz, Liszt, and others. It includes a study of program music, piano and

song literature, and the rise of national schools of musical composition. Representative works are studied through performance recordings, and radio listening.

Credit: 2 semester-hours

MUSIC 499A. *Problems in the Teaching of School Music*

This is a post-student teaching course. It aims to (1) evaluate student-teaching experiences; (2) give an opportunity to the student to share with his classmates the problems encountered in student teaching and seek a possible solution for the same; (3) meet shortages in teacher preparation not provided for in previous courses; (4) give the student a unified view of school-music education before he enters the teaching field. The content of this course is determined largely by the expressed needs of the students.

Credit: 2 semester-hours

MUSIC 499B. *Workshop in School Music*

This course is designed primarily for music teachers-in-service who wish to work out projects for use in their respective schools. The content of this course is determined by needs in the field. It may include folk-song dramatizations, small vocal and instrumental ensembles, the integration of music with other subjects in the curriculum, music for boys, visual aids in music pageants, festivals, and materials for special programs. This course provides the teacher with a number of units of work suitable for classroom use.

Credit: 2 semester-hours

HEALTH EDUCATION 407. *Prevention and Care of Athletic Injuries*

This is a lecture and laboratory course designed to acquaint the student with ways to prevent and to care for the common injuries sustained in athletics.

Credit: 2 semester-hours

HEALTH EDUCATION 408. *Driver Education*

Part I

This part consists of a minimum of 40 hours of class recitations and discussions for which home reading and study have been assigned. The following topics are included: (1) history and development of driver education and training programs; (2) objectives of driver education; (3) local, state, and national traffic safety programs; (4)

driver qualifications; (5) psycho-physical testing; (6) curriculum content of school courses in driver education and training; (7) construction, operation, and maintenance of automobiles; (8) traffic laws and driver licensing; (9) traffic engineering; (10) pedestrian education and protection; (11) equipment for teaching driver education; (12) liability, costs, and insurance; (13) planning driver education as a part of the daily program of the high school; (14) public relations; (15) records and reports; and (16) visual aids in teaching driver education.

Part II

This part consists of a minimum of 20 hours devoted to the following: (1) behind-the-wheel instruction; (2) demonstrations and student-teacher practice in the car; and (3) road tests in traffic. Home reading and study are required in preparation for these projects.

Prerequisite: License to drive a car with three years of driving experience with satisfactory driving record

Credit: 3 semester-hours

HEALTH EDUCATION 411. *School Health Services*

The student is familiarized with the health services available in the school. The part which the teacher plays in coordinating his activities with the school medical staff is emphasized.

Credit: 2 semester-hours

PHYSICAL EDUCATION 404. *Tests and Measurements in Physical Education*

This course is designed to acquaint students majoring in physical education with the history of measurement and evaluation in this field and to understand current trends and practices. Various tests in general qualities and traits relating to motor performance and tests relating to sports skills are presented to and administered by the students. Test evaluation and construction of written test questions are discussed. Methods of treating statistical data relating to physical education are presented.

Credit: 2 semester-hours

PHYSICAL EDUCATION 409. *Organization and Administration of Physical Education*

The details of organizing the units of the physical education programs are discussed. Various topics, such as legislation, financing,

curriculum construction, grading, excuses, plant facilities, supplies and equipment, and office management are considered.

Credit: 2 semester-hours

PHYSICAL EDUCATION 410. *Water Safety and First Aid*

This course includes intensive instruction in swimming, diving, water sports, boating, canoeing, water safety, and first aid. Students can qualify for Red Cross certificates during this course.

Credit: 2 semester-hours

PHYSICAL EDUCATION 411. *Organization and Administration of Athletics*

The purpose of the course is to offer practical suggestions and aids for the managing of affairs of an athletic program to those who expect to become teachers, supervisors, and directors of physical education.

The items discussed include athletic eligibility, management, equipment, awards, finances, budgets, safety, maintenance, planning of facilities, junior and senior high school athletics, and current athletic trends.

Credit: 2 semester-hours

PHYSICAL EDUCATION 412. *Organization and Administration of Recreation*

This course is designed to develop an understanding of the philosophy, scope and values of recreation in our contemporary life. Program planning, suitable activities for various age levels, and publicity and promotion are discussed. There are two hours of lecture-recitation per week.

Credit: 2 semester-hours

THE NEW JERSEY STATE SCHOOL OF CONSERVATION

The six State Colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest, Sussex County. Credit for the courses given at the New Jersey State School of Conservation may be applied toward the Master's degree at the New Jersey State Colleges, subject to approval in advance by the institution concerned. Students are advised to check with their advisers relative to the application of these credits towards graduate degrees.

The following courses may be offered at the New Jersey State School of Conservation. For complete descriptions, please refer to the departmental write-ups appearing in this bulletin. Special descriptive announcements may also be had by writing to the New Jersey State School of Conservation, Branchville, New Jersey.

FINE ARTS DEPARTMENT

- Fine Arts 415. *Designing in Native Materials*
- Fine Arts 474A. *Arts and Crafts in Education*

GEOGRAPHY DEPARTMENT

- Geography 420. *Field Geography and Conservation*

INDUSTRIAL ARTS DEPARTMENT

- Industrial Arts 442. *Conservation of Basic Industrial Materials*
- Industrial Arts 443. *The Use of Basic Industrial Materials in Industry*

EDUCATION DEPARTMENT

- Education 440. *Camping Education*
- Education 441. *Conservation Education*
- Education 442. *Practicum in Camp Leadership*
- Education 444. *Practicum in Conservation Education*
- Education 480. *Field Science for Elementary Teachers*

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

- Physical Education 410. *Water Safety and First Aid*

SCIENCE DEPARTMENT

- Science 405. *Field and Laboratory Studies in Science*
- Science 411. *Problems in Field Studies in Science*
- Science 412. *Field Studies in Science: Biological*
- Science 413. *Field Studies in Science: Physical*
- Science 414. *Conservation of Plants and Animals*
- Science 415. *Conservation of Soil and Water*
- Science 419. *Field Science and Conservation*
- Science 420. *Water Supply and Conservation Problems*

SOCIAL STUDIES DEPARTMENT

Social Studies 477. *Rural Sociology*

Social Studies 482. *Conservation and Rural Economic Life*

Social Studies 494. *Social Studies and Conservation*

INDEX

	PAGE
Administration	5
Montclair State College	5
Administrative Officers—Graduate Division	5
Graduate Council	6
State Officials	5
Assistant Commissioner for Higher Education	5
Commissioner of Education	5
Director of Teacher Education and Certification	5
State Board of Education	5
Administration of Master's Degree Programs	11
Admission and Matriculation for the Master's Degree	15
Matriculation Procedures	16
Types of Admissions in the Degree Programs	17
Admission of Veterans	19
Procedures	19
Application for Conferment of A. M. Degree	21
Attendance at Commencement	21
Business Education Department	27
Course Offerings	29
Graduate Courses	29
Senior-Graduate Courses	33
Graduate Program of Studies	28
Master of Arts Degree in Business Education	28
Organization of Department	27
Certification Students	18
General Procedures	18
Master's Degree	18
Student Teaching	19
Change of Schedule or Program	26
Course Numbering System	23
Eligibility for Enrollment	23
Implications	23
Master's Degree Credit	23
Special Restrictions for Graduate Program Credit	24
Course Offerings and Scheduling	26
Education Department	37
Course Offerings and Scheduling	26
Education Department	37
Course Offerings	40
Graduate Courses	40
Senior-Graduate Courses	56
Course Requirements for the A. M. Degree in:	
Administration and Supervision	37
Personnel and Guidance	38
Organization of Department	37
English Department	65
Course Offerings	67
Graduate Courses	67
Senior-Graduate Courses	75
Organization of Department	65
Requirements for Graduate Study in the English Department	65

	PAGE
Enrollment Regulations and Procedures	25
Fees and Service Charges	25
Faculty	6
Emeritus Faculty	7
Graduate Faculty	6, 12
Library and Auxiliary Services	6
Secretarial Staff	6
Fees	25
Fine Arts Courses	153
Foreign Language Department	79
Graduate Courses in French	80
Graduate Courses in Spanish	81
Graduate Program of Studies	79
Organization of Department	79
Geography Courses	158
Health Education Courses	164
History and Development of the Graduate Division	9
Industrial Arts Department	84
Course Offerings	85
Graduate Courses	85
Senior-Graduate Courses	87
Graduate Program of Studies—Master of Arts Degree in Industrial Arts Education	84
Organization of Department	84
Information Relative to the Implementation of Program Policies	23
Change of Schedule or Program	26
Enrollment Regulations and Procedures	25
Explanation of Course Numbering System	23
Eligibility for Enrollment	23
Master's Degree Credit	23
Special Restrictions for Graduate Program Credit	24
Information as to Course Offerings and Scheduling	26
Programs, Regulations, Procedures—Subject to Change	26
Rating System	24
Retention Standard	25
Student Load	25
Withdrawal from a Course	26
Library Facilities	10
Location of College	10
Major Areas for A. M. Degree	14
Master's Degree Program Patterns	14
Area of Concentration	14
Basic Professional Education	14
General Education Electives	15
Research	14
Master's Degree Programs	11
Administration	11
Graduate Point of View	13
Implementation of Program Policies	23
Major Areas	14
Program Patterns	14
Purposes of Graduate Study	12
Requirements for A. M. Degree	19
Research and Thesis	22

	PAGE
Master's Thesis	22
Mathematics Department	89
Course Offerings	91
Graduate Courses	91
Senior-Graduate Courses	97
Organization of Department	89
Requirements for the Master's Degree in Mathematics	89
Music Courses	163
New Jersey State School of Conservation	167
Course Offerings	167
Organization	167
Other Courses That May Be Used as Electives	153
Fine Arts Courses	153
Geography Courses	158
Health Education Courses	164
Music Courses	163
Physical Education Courses	165
Physical Education Courses	165
Professional and Academic Status of the College	10
Accreditation	10
Membership	10
Purposes of Graduate Study	12
Rating System	24
Grades	24
Requirements for the A. M. Degree	19
Application for Conferment of Degree	21
Attendance at Commencement	21
Certification Evidence	21
Comprehensive Departmental Examination	20
Credit-hours—Total	19
Education Courses	19
Level of Courses	20
Major Field	19
Research	20
Residence	21
Scholastic Standards	20
Thesis	20
Time Limit	20
Transfer Credit	21
Research and Master's Thesis	22
Master's Thesis	22
Nature and Purpose	22
Residence Requirements for Master's Degree	21
Retention Standard	25
Science Department	100
Course Offerings	102
Biology	102
Graduate Courses	102
Senior-Graduate Courses	103
Chemistry	105
Graduate Courses	105
Senior-Graduate Courses	106
Physics	108
Graduate Courses	108
Senior-Graduate Courses	110

	PAGE
Science	112
Graduate Courses	112
Senior-Graduate Courses	113
Organization of Department	100
Requirements for the A. M. Degree in Science	101
Service Charges	25
Social Studies Department	117
Course Offerings	119
Background Studies in American Life	136
Field Studies in American Life	133
Graduate Courses	119
Senior-Graduate Courses	123
Organization of Department	117
Requirements in the Social Studies Department for the A. M. Degree	117
Speech Department	137
Course Offerings	139
Graduate Courses	139
Senior-Graduate Courses	144
Service Courses for Non-Speech Majors	151
Organization of Department	137
Requirements for the A. M. Degree in Speech	138
Student Load	25
Transfer of Credits for Master's Degree	21
Withdrawal from a Course	26







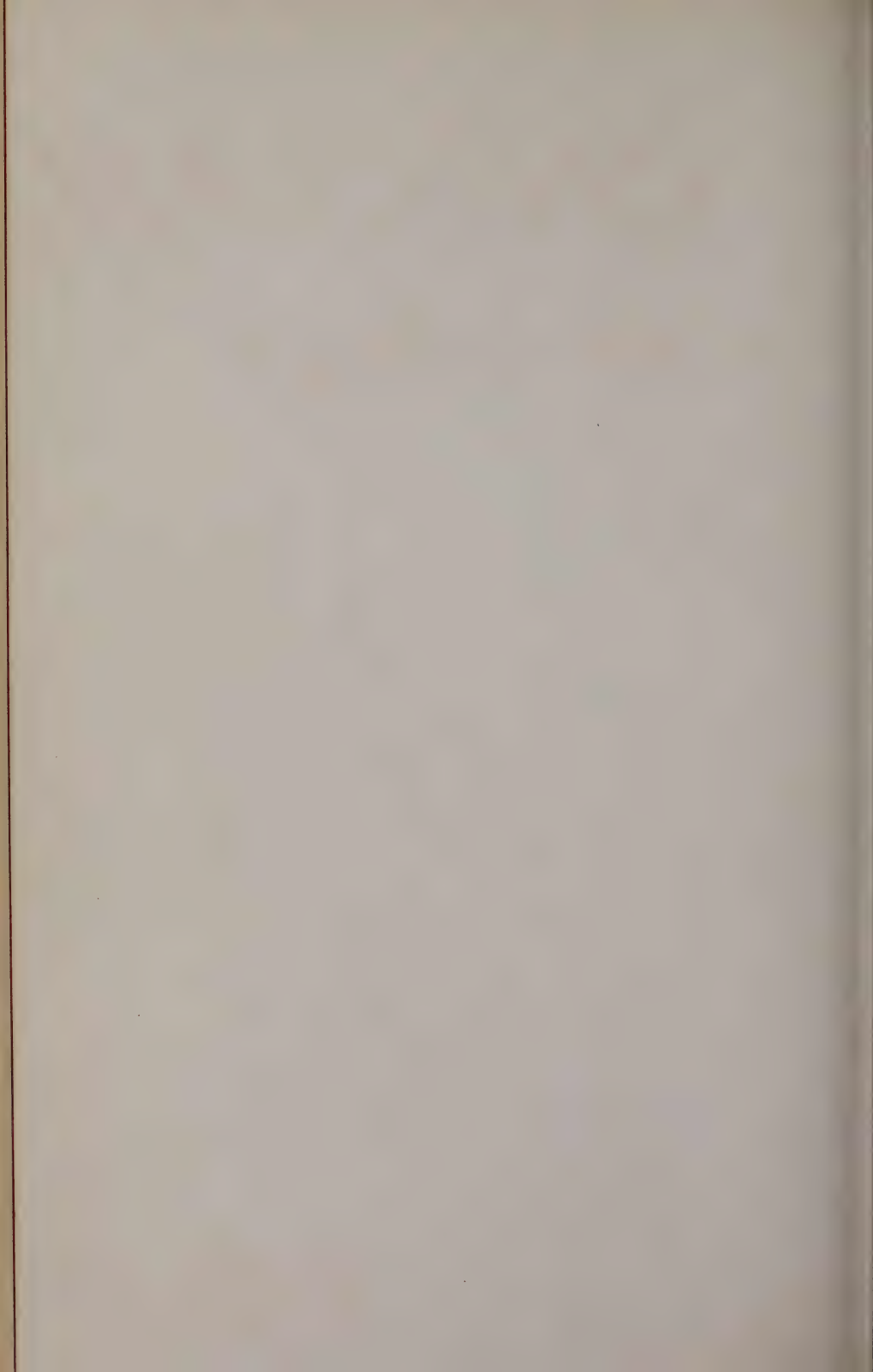
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UNDERGRADUATE
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1963-4



Bulletin of Information

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Catalog of Courses

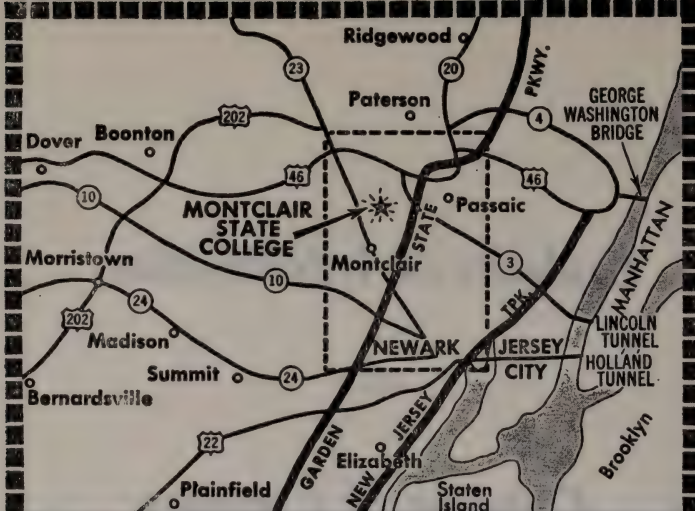
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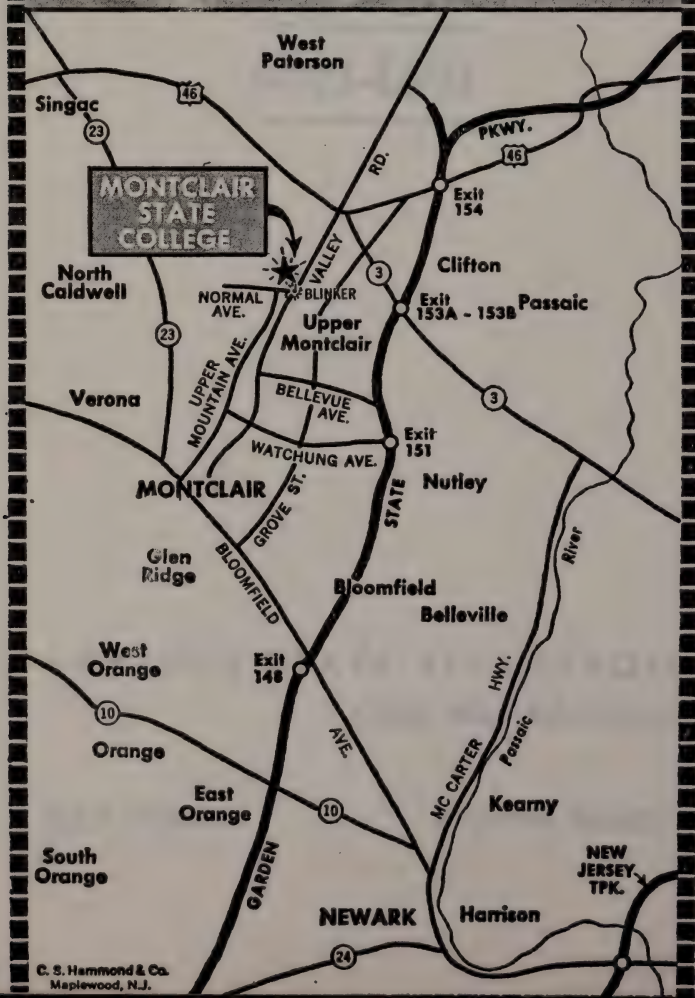
MONTCLAIR, NEW JERSEY

VOLUME FIFTY-FIVE

NUMBER FOUR



Best Routes to MONTCLAIR STATE COLLEGE Upper Montclair, New Jersey



HOW TO GET TO MONTCLAIR STATE COLLEGE

Location

Montclair State College is on Valley Road and Normal Avenue, Upper Montclair (turn at the blinker). The College is one mile south of the junction of Routes 3 and 46 on Valley Road.

Directions for Reaching the College

From *Bloomfield Avenue*, Montclair Center (Sear's store) proceed north on Valley Road—two miles to the Normal Avenue blinker.

From *Route 46 East* the landmark is West's Diner; take the next right, Valley Road—one mile to blinker at Normal Avenue.

From *Route 46 West*, the landmark is the junction with Route 3. Turn on Valley Road to Montclair, bear right on cloverleaf and proceed south under Route 46—one mile to blinker at Normal Avenue.

From the *Turnpike North* of Exit 10 or *South* from George Washington Bridge turn at Route 3 West or Route 46 West, then as above. From the *Turnpike South* of Exit 10, leave the Turnpike at Exit 10 and follow directions for Garden State Parkway North.

From *Garden State Parkway South* turn left at Exit 153B and proceed west on Route 3 to Valley Road.

From *Garden State Parkway South* turn at Route 46 West (Clifton Exit 154) thence to Valley Road. If you miss that turn, continue South to Exit 151, Watchung Avenue, thence west to Valley Road and north to blinker at Normal Avenue.

The #60 *Public Service Bus* from Newark to Montclair terminates at the South end of the campus.

The #76 *Public Service Bus* from Paterson to Orange stops at Valley Road and Normal Avenue.

The #66 *DeCamp Bus* from New York, which leaves on the half hour from Platform 73, Port Authority Bus Terminal, stops at Valley Road and Mt. Hebron Road—one long block from the campus.

The *Erie Railroad*, Montclair Heights Station, is at the Southwest corner of the campus.

WHEN IN DOUBT — CALL PILGRIM 6-9500



CALENDAR

1963

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MONTCLAIR STATE COLLEGE

CALENDAR 1963-1964

1963

September 6	Faculty Meeting
September 7	Freshman Orientation, First Session
September 9-11	Registration
September 12	Classes Begin—Undergraduate Division
September 14, 16, 17	Registration—Graduate and Part-Time Division
September 18	Graduate and Part-Time and Extension Classes Begin
September 24	Fall Convocation and Commencement Exercises
September 12-27	Class Instruction Period—Senior Fine Arts, Home Economics, Industrial Arts, and Music Majors
October 28-Nov. 1	Junior Week
November 7-9	Faculty Institute—No Classes
November 15	Senior Visiting Day—Fine Arts, Home Economics, Industrial Arts, and Music Majors
November 28-30	Thanksgiving Recess—Begins at Close of College Day on November 27
November 30	Final Date for Filing Application for Conferment of A.M. Degree, 1964
December 2-Jan. 24	Senior Student Teaching Period—Fine Arts, Home Economics, Industrial Arts, and Music Majors
December 6	Senior Visiting Day for Spring Semester
December 18	Student Teachers Christmas Recess Begins at Close of College Day

1964

January 1	New Year's Day—No Classes
January 2	Classes Resume
January 16-23	Examination Week
January 24	First Semester Ends—Undergraduate Division
January 25	First Semester Ends—Graduate and Part-Time Classes
January 27-30	Registration
January 27-Feb. 21	Junior Practicum—Fine Arts, Home Economics, Industrial Arts, and Music Majors
January 27-April 10	Senior Student Teaching Period for 10-week group
February 1, 3, 4	Registration—Graduate and Part-Time and Extension Division
February 3	Classes Begin
February 5	Classes Begin—Graduate and Part-Time and Extension Division
February 24-June 4	Class Instruction Period for Junior Practicum Participants
March 27	Good Friday—No Classes
March 30-April 4	Spring Recess
April 6	Classes Resume
April 13-May 29	Class Instruction Period for Seniors Returning from 10-Week Student Teaching
May 30	Memorial Day—No Classes
May 28-June 4	Examinations—All Classes Except Seniors
May 31	Baccalaureate
June 3	Commencement

TABLE OF CONTENTS

Area Maps	2	II. Admission as an Undergradu-	
Location	3	ate Transfer Student	34
Campus Map	4	III. Admission to the Graduate	
Calendar—1963-1964	5	Division	34
College Calendar—1963-1964	6	Placement Service	35
State Officials	9	Alumni Association	35
State Board of Education	9	Montclair State College	
Commissioner of Education	9	Development Fund	35
Assistant Commissioner for		Administrative Organization	35
Higher Education	9	Instructional Division	36
Director of Teacher Education		Student Personnel Division	36
and Certification	9	Business Division	36
College Administration	9	Bureau of Field Studies	36
Faculty	11	New Jersey State School of	
Library Staff	23	Conservation	36
Health Services	23	Graduate Division	37
Secretarial and Clerical Assistants	23	Division of Field Services	37
Administration	23	Part-Time and Extension	
Student Personnel	23	Division	37
Business Office and General		Summer Session	37
Clerical	23	STUDENT PERSONNEL	
Registrar's Office	24	ACTIVITIES	38
Part-Time, Extension, and		General Citizenship	38
Graduate Office	24	Student Government Association ..	38
Audio-Visual Department	24	Orientation of New Students	38
Student Teaching and Placement	24	Music and Art	39
Instructional Departments	24	Drama and Theater Productions ..	40
Faculty-Student Cooperative		Assembly Programs	40
Association, Inc.	24	Student Exchange with French and	
GENERAL INFORMATION ..	25	Spanish Speaking Countries ..	40
Philosophy	25	College Athletics	40
Accreditation	26	Student Publications	41
History of Montclair	26	Housing Accommodations	41
Grounds and Buildings	27	Social Activities	41
Library	28	Honor Societies, Fraternities,	
Cosla Collection of Painting	29	Sororities, and Clubs	42
Expenses	29	Who's Who in American	
Faculty-Student Cooperative		Universities and Colleges	42
Association	30	Student Personnel Services	42
Gifts	30	Student Personnel Division	42
Admissions	30	Student Counseling and	
I. Admission to the Freshman		Advisement	42
Class	30	Attendance and Absences	42
A. Applications	30	Veterans Counseling	42
B. Entrance Examinations ..	31	Health Service	43
C. Academic Requirements		Student Insurance	43
for Admission	31	Parking	43
D. Special Requirements for		Scholarships and Loans	44
Admission	32	New Jersey State Scholarships ..	44
E. Freshman Honors Sections	33	Student Work Program	45

TABLE OF CONTENTS

Guaranteed Bank Loans	45	Probation	54
National Defense Student Loan Program	45	Honors Program	54
New Jersey Bell Telephone Company Scholarships	46	Professional Background Courses .	54
Edward Russ Scholarship Fund.	46	General Education	54
Chapin Memorial Fund	46	Group I. Social Studies	55
John C. Stone Scholarship	46	Group II. Humanities	56
Margaret B. Holz Fund for Student Exchange	46	Group III. Science and Mathematics	56
Mark Andrews Scholarship Fund	46	Group IV. Mental and Physical Health	57
Field Studies Fund	46	The Department of Education	58
Clarence O. S. Howe Memorial Organ Fund	46	Organization and Activities	59
Part-Time Employment Service.	46	Student Teaching	60
Panzer School of Physical Education Scholarships	47	Requirements for Assignment to Student Teaching	61
Judge Esther Waterman Scholarship	47	Required Courses	61
Phi Eta Sigma Scholarship	47	Departmental Course Offerings .	61
Adelphes Club Scholarship	47	Elementary Education Courses .	67
B. Croce Educational Society	47	The Department of Business Education	68
Teresa Farrell Scholarship	47	The Department of English	80
Experiment in International Living	47	The Department of Fine Arts	86
THE COLLEGE CURRICULA .	48	The Department of Foreign Languages	94
Fields of Instruction	48	The Beginning Languages	95
General Education	48	French	96
Specialization	49	The German Minor	99
Basic and Specialized Professional Education	49	Latin	100
Summary of Course Requirements for the Bachelor of Arts Degree	49	Spanish	103
The Laboratory School	50	Language	106
College High School	50	The Department of Geography ..	107
Credits and Standards	51	The Department of Home Economics	113
Credits	51	The Department of Industrial Arts	120
Rating System	51	The Department of Mathematics ..	125
Degree and Certificate	51	The Department of Music	133
Scholastic Standards	52	Panzer School of Physical Education and Hygiene	146
Scholastic Honors	53	The Department of Science	157
Requirements for Graduation and Bachelor of Arts Degree	53	The Department of the Social Studies	173
		The Department of Speech	186

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Business Office and General Clerical

<i>Purchasing Assistant</i>	Henry Steiner
<i>Accounting</i>	
<i>Supervising Accountant</i>	Elliot Tannen, B.B.A.
<i>Bookkeeper, Appropriations</i>	Bernice Bucceri
<i>Bookkeeper, Payrolls</i>	Samuel Eells
<i>Principal Bookkeeper, Revenues</i>	Nicholas Guarino
<i>Bookkeeper, Student Accounts</i>	Arthur Thornton
<i>Duplicating Room and Post Office</i>	Helen A. Barker
<i>Duplicating Room and Post Office</i>	Carol Micks
<i>Manager, Food Service</i>	Donald Forth
<i>Secretary, Secretarial Pool</i>	Gaetena Manopoli
<i>Secretary, Secretarial Pool</i>	Barbara Hlywa
<i>Clerk Stenographer</i>	Judith Jensen
<i>Switchboard and Reception</i>	Helen Meury
<i>Switchboard and Reception, Clerk</i>	Luba Zintchenko
<i>Secretary, Business Manager</i>	Joan Micks
<i>Secretary, Superintendent of Buildings</i>	Marian H. Blake
<i>Clerk</i>	Harriet Sepanak
<i>Parking Coordinator</i>	Herbert Cadmus

THE FACULTY

Registrar's Office

<i>Secretary</i>	Frances Smith
<i>Secretary</i>	Frances Steiner
<i>Senior Key Punch Operator</i>	Caroline Murphy
<i>Clerk</i>	Marlene Bouquot
<i>Senior Clerk</i>	Mildred Berla

Part-Time, Extension, and Graduate Office

<i>Secretary</i>	Maxine Bullard, A.B.
<i>Secretary</i>	Rose Metz
<i>Secretary</i>	Rose Tashjian

Audio-Visual Department

<i>Secretary</i>	Frances Castiglione
<i>Secretary</i>	Joan M. Marx
<i>Secretary, College Film Library</i>	Doris Asdal
<i>Supervisor, Essex County Film Library</i>	Ellen Boal

Student Teaching and Placement

<i>Secretary</i>	Patricia Hogan
<i>Secretary</i>	Ellen Reynolds

Instructional Departments

<i>Secretary, Physical Education Department</i>	Ethel Bakker
<i>Secretary, Home Economics Department</i>	Estelle Marsand
<i>Secretary, Center for Economic Education</i>	Vashti White
<i>Secretary, Bureau of Field Studies</i>	Margaret Mostica
<i>Secretary, College High School</i>	Elizabeth Pettegrove
<i>Secretary, Education Department</i>	Esther B. Spengeman, A.B.
<i>Secretary, English and Speech</i>	Catherine Atkinson
<i>Secretary, Science and Social Studies</i>	Kitty Korch
<i>Secretary, Foreign Language and Music</i>	Lillian Tannen
<i>Secretary, Fine Arts</i>	Helen Ochs
<i>Secretary, Public Relations</i>	Ida Resitano

Faculty-Student Cooperative Association, Inc.

<i>Manager</i>	A. Deane Nichols
<i>Manager, College Book Store</i>	Harriet Quinlan, B.S.
<i>Secretary</i>	Doris Asdal

GENERAL INFORMATION

Montclair State College was organized to serve New Jersey by preparing youth for constructive and useful lives in society. For the foreseeable future the major responsibility of the College will be to prepare teachers. This general purpose is fundamental to the curriculum, courses of study, and the methods of teaching.

The more specific aims of the College are:

- To prepare teachers for the secondary schools of the State.
- To prepare those majoring in industrial arts, fine arts, music, home economics, physical education, and speech to teach in both the elementary and secondary schools.
- To meet special needs of the school systems of the State, for example: Conducting surveys to determine speech patterns and difficulties of school children, sponsoring reading clinics for teachers and students, organizing workshops and institutes, and other services.
- To offer graduate courses leading to the Master of Arts degree in those fields in which the College has qualified staff and adequate facilities. The Graduate Bulletin provides additional information.
- To offer an on-campus summer session with courses for those wishing to matriculate for the A.M. degree and also for those who wish to continue their professional preparation, earn secondary school certification, and for those who wish to accelerate their graduation.
- To offer field courses for teachers who wish to enlarge their scholastic background and increase their knowledge of education and thus improve their teaching and meet advanced certification requirements. Bulletins of the Part-Time and Extension Division explain these opportunities in detail.

PHILOSOPHY

Montclair State College believes in and implements for each student a four-fold program of general education, professional education, specialization education, and co-curricular activities.

One of the chief supports of good teaching is knowledge of subject matter; the greater the teacher's knowledge, the more effective will be his teaching. Because of the new knowledge in many fields of investigation and the recognition of interrelation of various fields, a teacher must not only know his own field in depth, but also be aware of the achievements in other fields of study; consequently, the College provides the broad program of general education in addition to concentration in one specific subject field.

The curriculum is designed to be sequential and integrated. From a broad base of general education in the first two years the student moves to more advanced work in his field of specialization and professional courses that prepare him to teach. Throughout the four years at Montclair State there is a systematic program of observations in the College High School and observation of good teaching techniques in College classes.

Knowledge of subject matter alone does not assure the best teacher, that is, the most effective means of sharing with others and

GENERAL INFORMATION

causing others to learn. Therefore, a knowledge of methods and teaching techniques in terms of adolescent growth and development is important to the secondary school teacher and will help that teacher adapt his broad and deep knowledge to individual needs.

Montclair State believes that educational and professional subjects become more meaningful when related to practical experience, observations and student teaching in the public school.

Since the co-curricular activities are an important part of the secondary school program, Montclair State College provides its students with an opportunity to develop skills in athletics, dramatics, and other student organizations that will enable them to supervise these activities as well as acquire the social poise needed to be a successful teacher.

Montclair State College has a counseling and guidance program involving the staff which has as its main aim obtaining the best results in all phases of the total program.

Montclair State College believes that the work and program of the College should serve not only students preparing for teaching and those engaged in teaching, but also other groups and communities in the State. Such services are rendered in accordance with resources of the College consistent with its overall purposes.

ACCREDITATION

Montclair State College is a fully accredited member of the National Council for the Accreditation of Teacher Education, the Middle States Association of Colleges and Secondary Schools, and the American Association of University Women.

HISTORY OF MONTCLAIR

In 1903 the State Board of Education recommended that a Normal School be established in northern New Jersey. The following year a 25 acre site was purchased in Upper Montclair. College Hall, the present administration building, was completed in 1908 and the first class was admitted in September of that year.

In 1915 Edward Russ Hall, a women's dormitory, was built with a bequest of the Honorable Edward Russ, member of the State Board of Education and Chairman of the Normal School Committee.

In 1927 the State Board of Education established a State Teachers College at Montclair for the education of teachers for secondary schools. The first class graduated from the four-year college curriculum in June, 1930.

In 1928 Chapin Hall, another women's dormitory, was added and the following year the College High School was completed. During the late 20's additional land was purchased bringing the total campus area to seventy acres.

Part-Time and Extension courses were added to the college pro-

gram in 1929, and the Summer Session in 1930. In the spring of 1932 the State Board of Education empowered the College to give graduate courses and grant the Master's degree.

In 1951 the voters of New Jersey passed a 15 million dollar bond issue to provide facilities at the six state teachers colleges. By 1957 four major buildings were constructed on the Montclair campus: Stone Hall, men's dormitory; Finley Hall with facilities for industrial arts, fine arts, home economics, mathematics and science; the Memorial Auditorium—Student Life Building and Cafeteria; and a physical education building.

In 1958 the State Board of Education approved the consolidation of Panzer College of Physical Education and Hygiene with the Montclair State Teachers College as the Panzer School of Physical Education and Hygiene with a major in the field of physical education.

As of July 1, 1958, the official name of the College became Montclair State College.

In November, 1959, the voters of New Jersey approved another bond issue which provided additional facilities at the six state colleges. As a result of this bond issue, Montclair State College now has a new music building, a library, two more dormitories, and additional classroom space. College Hall, the original building on campus which serves as an administration building and classroom building will be completely renovated.

GROUNDINGS AND BUILDINGS

The College now has the following facilities:

College Hall contains administrative offices, Audio-Visual Center, classrooms and faculty offices.

The Harry A. Sprague Library which also houses the Dr. and Mrs. O. K. Cosla collection of paintings.

Charles Finley Hall houses the Fine Arts, Home Economics, Industrial Arts, Science and Mathematics Departments. Virgil O. Mallory Hall, new wing added in 1962-63 will house additional facilities for Science and Mathematics.

The Student Life cluster of buildings contains a cafeteria, student offices, bookstore, recreation rooms, student lounges, faculty lounge and dining room, the Alumni Lounge and office, the Memorial Auditorium, the Speech Department offices and classrooms. The auditorium contains a pipe organ of 3,500 pipes.

The Music Building with practice rooms, studios, recital halls and faculty offices.

The Physical Education Building contains four gymnasiums, teaching areas, and facilities for men and women.

The College High School contains a small auditorium, gymnasium, library, home economics rooms and classrooms.

Five dormitories are available, three for women and two for men.

GENERAL INFORMATION

- A total of 200 men and 400 women can be accommodated on campus. Each dormitory has laundry facilities, lounge, recreational and social facilities, storage rooms and offices.
- A recreational building with fireplaces and a kitchen provides a meeting place for clubs and other student groups.
- An official residence for the President of the College is located near the campus.
- The Lillian Gilbreth home management demonstration house for home economics.
- An athletic field adjacent to the gymnasium includes a football field, baseball diamond, and track.
- An outdoor Amphitheater.
- In addition to the permanent buildings listed above, there are four temporary buildings containing classrooms, laboratories and faculty offices.

LIBRARY

The new Harry A. Sprague Library is of modern construction using brick, glass and aluminum facings. It is completely air-conditioned. It has three floors, and is planned to accommodate 800 students and an eventual collection of 200,000 volumes.

The main floor includes the Circulation Area, the Technical Processes Area, and the Reference and Bibliography Center. Here, also, is the Humanities Center, which includes books and periodicals in the fields of Philosophy, Religion, Literature, Languages, Music, Fine Arts, History, Biography and Fiction.

The second floor has three main subject areas. The Science and Mathematics Center includes books and periodicals in the fields of Physics, Chemistry, Astronomy, Geology, Biology, Botany, Zoology and in the various branches of Mathematics. The Social Science Center contains books and periodicals in the fields of Sociology, Political Science and Government, Economics, International Relations, Anthropology and Geography. The Education Center contains books in Education, Psychology, Physical Education, Health, Industrial Arts and Business Education. Near the Education area is a curriculum laboratory. On the lower level there is an Art Gallery, a Reserve Book Room, lounges and storage areas.

Special collections are located in an attractive room on the second floor. These collections include the China Institute Library, a gift from the China Institute of New Jersey. Books showing Chinese culture in art, philosophy, literature and history make up this selection. The Webster Memorial collection of modern poetry contains some first editions and autographed copies. The Finley Science Library, the Historical Textbook Collection and the Lincoln Collection hold special interest. The Alumni Memorial Library, received as alumni gifts, includes fine editions of classics. Early books in Physical Education, some in foreign languages, make up the unusual

GENERAL INFORMATION

collection which was given to the library when Panzer College of Physical Education merged with Montclair State College.

Two classrooms are located outside the main area of the library but are an integral part of the building. Faculty carrels, individual study desks, typing areas and conference rooms are also provided.

Supplementing the College Library is the library of the College High School which houses over 4,700 volumes and is located in the College High School. These books are available through the main catalog as well as through the catalog of the College High School. The High School Librarian works in close cooperation with the members of the College Library staff, particularly in the field of literature for adolescents.

COSLA COLLECTION OF PAINTING

The college recently acquired a valuable and unusual collection of paintings, some of them dating back to as early as the Sixteenth Century. The collection is a gift from Dr. and Mrs. O. K. Cosla of New York City.

EXPENSES

General Expenses for Regular College Year of Approximately 37 Weeks:

The annual tuition and fees for New Jersey residents are:

Tuition	\$150.00
Student Government Association Fee	46.00
General Service Charge	32.00
Student Teaching Fee	15.00
Registration Fee	4.00
	<hr/>
	\$247.00

Students may purchase all meals in the college cafeteria at the rate of \$13 per week, payable in quarterly installments in advance. Lunches are available for commuting students.

Special fees in connection with senior graduation activities are determined by a senior committee each year prior to Commencement.

The tuition fee is payable in two installments, \$75.00 in September and \$75.00 in January. The student fees and service charges are also payable in two installments, one-half in September and one-half in January. These charges are subject to revision.

Living Expenses for Regular Year

The charge for board and room in dormitories is \$666.00 for the academic year. This charge includes a room in the dormitory and all meals when the College is in session. Quarterly payments are due and payable for the charge for board and room as follows:

GENERAL INFORMATION

\$166.50 before registration in September

\$166.50 on or before November 1

\$166.50 on or before registration in February

\$166.50 on or before April 1.

It is essential that these charges be met on the dates specified; otherwise, forfeiture of dormitory privilege may result.

After official notice of acceptance a student desiring consideration for dormitory housing should write to the Dean of Students for an application.

Students who are unable to be accommodated in dormitories are assisted in obtaining rooms in private homes near the College.

Refunds

Some students find it necessary to withdraw from College before completion of their courses. Upon receipt of an official written notice of withdrawal, a portion of the tuition and Student Government fee paid by the student is refunded on a prorated basis. No refund is made after expiration of half of the semester.

SCHOLARSHIPS AND LOANS

For information about scholarships and loans, see page 44.

FACULTY-STUDENT COOPERATIVE ASSOCIATION

The Faculty-Student Cooperative Association is a legally chartered non-profit corporation organized to operate the College Book Store, vending machines, and other student services. The governing board is made up of student, faculty, and alumni representatives.

GIFTS

The College has received many gifts which enrich student life. Alumni, faculty, students, and friends raised over two hundred thousand dollars that built and equipped the Student Life Building.

The pipe organ in the Memorial Auditorium is the result of private gifts. Other gifts have been provided by classes and friends and are serving a variety of purposes on the campus.

ADMISSIONS

Admission requirements are arranged for three groups: Those entering the freshman class; those entering with advanced undergraduate credits; and those entering the Graduate Division.

I. ADMISSION TO THE FRESHMAN CLASS

A. APPLICATIONS

All candidates for admission to the freshman class should file

GENERAL INFORMATION

applications in the Office of Admissions before January 15th of the year in which entrance is desired. Admission forms are available from September 15th (one year prior to date of desired entrance) through January 15th. Applicants should submit all admission forms as soon after September 15th as possible.

All requests for application forms, inquiries for information concerning admission as freshmen and as undergraduate transfer students should be addressed to:

Direction of Admissions
MONTCLAIR STATE COLLEGE
Upper Montclair, New Jersey

No application for entrance shall be considered unless it is accompanied by a \$5.00 non-refundable fee. After a student has been accepted by the College, a place shall be reserved if he transmits a \$32.00 advance deposit to be applied against the student service fee when he enters the institution. The deposit is non-refundable.

B. ENTRANCE EXAMINATIONS

Applicants for admission to the freshman class shall take either the State College Entrance Examination prepared under the direction of the Commissioner of Education or the Scholastic Aptitude Test of the College Entrance Examination Board. Application for the latter should be made directly to the College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey, at least four weeks before the desired test date. Results of the test must be in the Office of Admissions before March 1st. All applicants who intend to use the College Board Examination for admission purposes are urged to take the December examination rather than a later one. It is advisable to have the results of the Junior College Boards reported to the Office of Admissions. Further information regarding test dates will be supplied with application.

C. ACADEMIC REQUIREMENTS FOR ADMISSION

A certificate showing graduation from the twelfth grade of an approved secondary school or a certificate showing that the applicant is scheduled for graduation during the current scholastic year is required. The certificate shall name the secondary school subjects the applicant has completed and in which he is enrolled, the number of weeks given to each subject, the number of recitation periods per week, and the scholastic standing of the applicant. The minimum units required for admission are as follows:

SUBJECT	UNITS
English	4
American History and Problems of Democracy	2
*Mathematics	1
Science	1

GENERAL INFORMATION

**Foreign Language	2
Restricted Electives to be selected from the areas of Social Studies, Science, Mathematics, and Languages	2
Free Electives	3
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Total	15

*It is recommended that where only one unit of mathematics is presented for admission it be one year of algebra. Business Mathematics will not satisfy the mathematics requirements. General Mathematics is acceptable only when accompanied by a letter to the Director of Admissions from the high school principal certifying that the course content includes excerpts from algebra, plane geometry, and trigonometry.

**Candidates for Business Education, Physical Education, Fine Arts, Home Economics, and Industrial Arts may substitute 2 units of work in these areas for the language requirement.

The above requirements are basic for admission to all specializations. However, students desiring to specialize in majors requiring a particularly broad and strong foundation must submit a minimum number of high-school units in these areas. The table below indicates the number of high-school units required at entrance for each specialization. As these requirements are minimal in nature, the table also indicates the number of high-school units recommended for admission to each specialization.

MAJOR	MINIMUM HIGH SCHOOL UNITS REQUIRED FOR ADMISSION	HIGH SCHOOL UNITS RECOMMENDED FOR ADMISSION
Business Education	0	2
English	4	4
Fine Arts	0	2
French, Latin, or Spanish	2	3 to 4
Home Economics	0	2
Industrial Arts	0	2
Mathematics	3	3½ to 4
Music	0	1 to 2
Physical Education	0	1
Science	2	3 to 4
Social Studies	2	2 to 4
Speech	0	1 to 2

D. SPECIAL REQUIREMENTS FOR ADMISSION

1. Age Certification: A statement of date of birth. Applicants shall be at least fifteen years, nine months old before taking the entrance examinations.

2. Health Report: The family physician, on a form supplied by the College, shall certify a candidate's health and physical fitness. The College Physician may be asked to evaluate a candidate's ability to perform curricular and professional responsibilities.

Two years of regular physical education are required of ALL STUDENTS at Montclair State College. Any applicant having a physical disability which might jeopardize his admission because of inability to participate in two years of regular physical education is urged to contact the College Medical Department for advice before filing admission forms. All individuals entering the teaching profession should be in excellent physical condition. It is doubtful that any

individual who cannot participate in the normal physical-education program has the stamina to become a successful teacher. In the past, applicants have been rejected medically for such disabilities as heart trouble, high blood pressure, acute asthma, defective eyesight, obesity and other conditions which may interfere with a teaching career.

The medical and physical examination form will be mailed only to those applicants who have been accepted by the College. This form shall be completed by a qualified physician following a thorough physical examination, and returned by the physician directly to the Office of Admissions within 14 days. The Admissions Office will refer this form to the College Physician who will either approve or reject the applicant.

3. Testimonials of Character: A testimonial of good moral character from a responsible person not related to the applicant by blood or marriage is required on forms furnished by the College.

4. High School Rating: A rating of the student's character and probable fitness to succeed in teaching will be made by the officials of the applicant's secondary school on forms furnished by the College.

5. Speech Test: Before a student may graduate from Montclair State College, he must satisfactorily pass a speech test since proper speech and diction are vital requirements for success in the teaching profession. The College is unwilling to accept a student who has any speech problem which cannot be corrected by reasonable effort on the part of the Department of Speech. Any individual who lisps, stammers, stutters, or has any other speech impediment or difficulty that might jeopardize admission to the College should contact the Chairman of the Department of Speech for advice regarding admission before filing entrance forms and paying the non-refundable application fee.

6. Requirements for Special Areas: In addition to the above requirements for admission, additional requirements are necessary for particular specializations. Before a student can be admitted to the physical education specialization, he is required to pass a standardized physical-education aptitude test. Applicants desiring to major in music are required to pass successfully a standardized musical aptitude test, a piano audition, and an audition on the student's major instrument of interest, which may include voice. Speech majors are required to pass an audition with three members of the Speech Department. All applicants who desire to major in French or Spanish are required to pass both conversational and written tests before being admitted. Latin students are expected to pass a written examination.

E. FRESHMAN HONORS SECTIONS

Special honors sections are open to incoming freshmen who have demonstrated high scholastic ability. Candidates are required to take the College Board Entrance Examination. A selected group of freshmen will be invited to become candidates for this program. Eligibil-

GENERAL INFORMATION

ity will be determined on the basis of oral and written examinations administered by the College. Applicants interested in the program should write to the Chairman, Academic Honors and Graduation Committee, Montclair State College. Candidates who qualify for consideration will be notified by April 30.

II. ADMISSION AS AN UNDERGRADUATE TRANSFER STUDENT

The College is unable to admit all qualified transfer students who are legal residents of New Jersey because of a shortage of classroom space. In order to be eligible for admission by transfer, the applicant is required to have completed satisfactorily a minimum of 24 semester hours of college-level credit from an accredited institution. Well-qualified applicants meeting the foregoing requirements will be considered in numbers consistent with the facilities of the College.

Requests for application forms and inquiries should be addressed to:

Direction of Admissions
MONTCLAIR STATE COLLEGE
Upper Montclair, New Jersey

Applicants are required to have all transcripts, credentials, and records on file in the Office of Admissions by April 1st for September admission, and by December 15th for late January admission. Definite notice of acceptance cannot be mailed until a few weeks before the beginning of any given semester.

III. ADMISSION TO THE GRADUATE DIVISION

Application blanks for admission to graduate work may be secured from the Chairman of the Graduate Council.

Official transcripts of all previous college work and a five dollar (\$5.00) application for matriculation fee must accompany the written application. No action is taken until such transcripts are received.

Upon receipt of the application blank and the transcripts of previous work, the student has personal conferences with the department adviser of the department in which he wishes to major, and with the Chairman of the Graduate Council. These conferences are a prerequisite to action of the committee on admissions. The student is notified in writing as to whether or not he has been accepted.

Senior students currently enrolled in the College with good academic records and within sixteen semester-hours of graduation may take up to eight semester hours of graduate work concurrently with the balance of their A.B. degree requirements and prior to graduation in courses of a senior-graduate level, i.e., between 400-499 in the most recent Graduate Bulletin. Such students must have permission signed by the Department Chairman, the Dean of the College, and the Chairman of the Graduate Council. The application blank must be obtained in the Registrar's Office.

For more complete information see the current Graduate Bulletin.

PLACEMENT SERVICE

Through the Placement Office, the College assists alumni and prospective graduates to find teaching and administrative positions appropriate to their preparation and abilities. In carrying out its objectives, the office compiles credentials for registrants, notifies candidates of job opportunities, informs prospective employers of qualified candidates and distributes supporting credentials, and arranges personal interviews for applicants and employers. The services of the office are offered to undergraduates and alumni without charge.

THE ALUMNI ASSOCIATION

All graduates of Montclair are members of the Alumni Association and are active members if they make an annual gift. Association officers, the executive board, and the resident executive secretary plan a schedule of events for all graduates and their guests. ALUMNI LIFE is mailed to each graduate several times a year, giving news of activities of the College, the faculty, and the alumni.

The Alumni Association strives to continue friendships among its members and with the College.

The alumni maintain an office in the Student Life Building and through their program of annual giving support the many activities of the College and of the College Development Fund.

NUMBER OF GRADUATES: 3,921 Normal School Diplomas; 7381 A.B. degrees; 2491 A.M. degrees as of September 1962.

THE MONTCLAIR STATE COLLEGE DEVELOPMENT FUND

To provide additional financial aid upon which to build an even better institution was and is the reason for the existence of the Montclair State College Development Fund.

A Board of Trustees consisting of friends of the College, parents, alumni, and faculty provide the direction for this organization.

Its activities include bringing distinguished theatrical groups to the campus, purchasing art objects and scholarly books, and underwriting the cost of further study for the faculty and students.

ADMINISTRATIVE ORGANIZATION

The college is organized for administrative purposes into three divisions: Instructional, under the direction of the Dean of the College; Student Personnel, under the direction of the Dean of Students; and, Business, under the direction of the Business Manager. The President of the college, who is the executive officer, administers through these divisions with the advice and counsel of the Administrative Council which is made up of administrative officers and department chairmen.

GENERAL INFORMATION

Instructional Division

The Dean of the College has direct supervision over the instructional division of the College. The Dean is assisted by department chairmen, the Registrar, librarians, and committees in considering matters related to instruction. This division is concerned with curricula, instructional facilities, teaching aids, assignment of staff and classrooms, and all matters related to the instructional program of the College.

Student Personnel Division

The Student Personnel Division has the responsibility of providing for the physical health, mental health, and social life of all students. The Dean of Students is the head of the personnel division. He is assisted in his responsibilities by assistant directors of personnel for men and women, the Director of Admissions, the Registrar, the College Physician, college nurses, dormitory directors, and faculty members who have specific assignments as advisers to student groups or individual students.

Business Division

The Business Division, under the direction of the Business Manager, has charge of financial matters such as budget preparation and control, purchase of materials, collection of fees, inventories and financial reports. Responsibility for plant operation, building and grounds is also in this division.

BUREAU OF FIELD STUDIES

The Bureau of Field Studies offers educational travel courses. They are described in various sections of this bulletin and more details are given in bulletins published by the Bureau of Field Studies. SOCIAL STUDIES 302, *Field Studies in Urban Life*, is required of all social studies majors in the junior year. The other field studies courses are elective.

NEW JERSEY STATE SCHOOL OF CONSERVATION

Montclair State College with the five other state colleges, the State Department of Education, and the State Department of Conservation and Economic Development jointly operate the New Jersey State School of Conservation at Lake Wapalanne, Stokes State Forest, Sussex County. Courses offered include field studies in biological and physical sciences, conservation of forests and wild life, conservation of soils and water, arts and crafts, field science for elementary-school teachers, water safety and first aid, camping education, rural sociology, and related subjects.

During the sophomore year, ALL students spend five days at the School of Conservation during which they experience various phases of education in the out-of-doors.

Descriptions of course offerings at the New Jersey State School of Conservation are contained in special announcements which may

be obtained by writing to the Director of the New Jersey State School of Conservation, Branchville, New Jersey.

THE GRADUATE DIVISION

Majors in graduate work are offered in the fields of Administration and Supervision, Business Education, English, Industrial Arts, Foreign Languages, Mathematics, Personnel and Guidance, Science, Speech, and Social Studies, leading to the degree of Master of Arts. In each curriculum there is a core of Education Department courses, subject-matter Department courses, and elective courses. The amount of each type of work depends on the candidate's undergraduate work and is determined by the Graduate Council.

Montclair senior-undergraduates who have completed 112 semester hours and who have a high scholastic average may enroll in courses at the 400 level for graduate credit. A special form for this enrollment is available in the Graduate Office.

Students interested in graduate study should write to the Chairman of the Graduate Council for a bulletin and information.

DIVISION OF FIELD SERVICES (Part-Time and Extension)

Through this division, the College offers resident senior-graduate, graduate, and teacher certification courses on campus during the late afternoons, evenings and Saturday mornings, and occasional off-campus courses. These courses are primarily designed to meet the needs of teachers-in-service and college graduates who are seeking certification to teach in New Jersey public secondary schools.

Extension courses are offered off-campus in any community in New Jersey in which the teachers-in-service desire the Division of Field Services to offer a particular course, if that course is listed in the Undergraduate Bulletin. Graduate courses are not offered off-campus. (It is necessary that twenty or more students enroll in such extension courses.)

Under certain circumstances Montclair State College undergraduates may schedule courses offered through the Division of Field Services. A form describing the procedure for doing this is available in the Registrar's Office.

Other information including bulletins may be obtained from the Director of Field Services, Montclair State College, Upper Montclair, New Jersey.

DIVISION OF FIELD SERVICES (Summer Session)

Those who are eligible for admission to the summer session are: 1) elementary, junior, and senior high school teachers; 2) undergraduate and graduate students of liberal arts colleges seeking secondary certificates; 3) graduate students seeking the Master's degree; 4) experienced teachers seeking administrator's and supervisor's certificates; 5) graduates of the two and three-year normal school courses who are working for a Bachelor of Arts degree; 6) normal

GENERAL INFORMATION

school, teachers college, and liberal arts college students, who have been permitted to meet certain requirements through summer session courses; 7) laymen who may wish to take certain courses because of their cultural interest.

Montclair State College undergraduates planning summer session work at this College or at another college or university should fill out the form, "Application for Permission to Take Summer Work", and secure the required signatures. Similar permission in writing will be required from undergraduates from other institutions. This should be done well in advance of the summer session registration date. Forms are available from the Director of the Summer Session.

The summer session begins during the last week of June or the first week of July and extends over a period of six weeks. The maximum load is 8 credit hours. For other information, including bulletins of the summer session, address the Director of the Summer Session, Montclair State College, Upper Montclair, New Jersey.

STUDENT PERSONNEL AND ACTIVITIES

General Citizenship

Montclair State College is organized for students who have an interest in promoting the welfare of society by teaching in the public schools. Opportunities are offered by the College for developing educational interest, physical health, emotional adjustment and social attitudes and habits. The students are expected to make definite contributions to the welfare of the College and are encouraged to demonstrate their leadership through cooperation and service during their years at Montclair. These leadership skills are among the important attributes for one who is preparing to be a teacher.

Student Government Association

The Student Government Association is composed of all undergraduate students. Its governing body is the Board of Trustees which includes a president, vice-president, treasurer, assistant treasurer, recording secretary, and corresponding secretary who are elected by the entire student body; the president and two representatives of the Senior, Junior, and Sophomore Classes and the president and one representative of the Freshman Class who are elected by their respective classes; the Dean of the College, one financial advisor appointed by the Administration, the Dean of Students, and the Assistant Directors of Students, who are non-voting advisory members.

The responsibilities of the Board include the handling of all student finances, the chartering and cancelling of all clubs, improvement of social and physical welfare, extra-curricular activities, and the general conduct of the student body.

A list of the committees appointed and clubs chartered by the Board of Trustees is found in the *Arrowhead*, the student handbook.

Orientation of New Students

Orientation means essentially adjustment to a new situation.

The purpose of the orientation program at Montclair State is to assist all freshmen and transfer students in getting used to their new surroundings. The Director of Admissions is responsible for this program in cooperation with the faculty and administration of the College, and particularly the Student Personnel division.

During the period of orientation which usually lasts about a week, freshmen have an opportunity to become acquainted with various officials of the College, with officers of the Student Government Association and with the elected class officers of the Sophomore Class who are officially in charge of the student phase of the orientation program, known as Freshman Welcome Week. Through the auspices of these various persons and groups, freshmen and transfer students are made aware of various campus organizations, and of their responsibilities and privileges as members of the student body.

Guided tours are arranged so that all newcomers to the campus will have a complete knowledge of facilities and opportunities available to them. Through numerous activities, the College attempts to develop in the new student a feeling for and an appreciation of its history, traditions, ideals and objectives.

In addition to basic instruction in the library, and registration which must be accomplished during this period, attention is also given to analytic tests useful in helping students in the future.

Recognizing that the most important immediate adjustment that must be made on the part of a newly entered student is adapting to the totally new social world, many of the activities of this particular week are designed to encourage new students to meet socially with various student groups and with faculty and administrative officials. The highlight of the social events of this particular week has traditionally been the President's Reception. Other events include the Big Brother-Big Sister Dance which gives freshmen an opportunity to meet with juniors, and the Peace Dance which gives the freshmen an opportunity to complete this Welcome Week association with the sophomores.

Music and Art

Cultural background courses in music and art are required of all students. In addition, music electives and the music organizations of the College provide opportunities for further study in fields of special interests. The music organizations of the College include: the A Cappella Choir, the Orchestra, the Band, the Opera Workshop and the Music Workshop, including various types of vocal and instrumental ensembles. Concerts are given throughout the school year by guest artists, music faculty, and advanced music students.

Because of the proximity of New York City, the College is able to offer unusually fine opportunities in music. Trips are frequently made to the Lincoln Center for the Performing Arts, the Metropolitan Opera, the New York Philharmonic Orchestra Concerts, and other musical events in the metropolitan area. Additional oppor-

GENERAL INFORMATION

tunities to attend other cultural affairs are afforded by the use of the Memorial Auditorium by community and state organizations.

The art electives give all students an opportunity to work creatively with various art media. The Fine Arts Department facilities include fully equipped laboratories for sculpture, painting, textiles, print making, ceramics, photography and puppet theater production. Trips are taken to art museums and galleries in the metropolitan area.

Drama and Theater Productions

The College recognizes the value of drama and theater in the cultural life of a well-rounded student. In the classroom, dramatic literature is studied in historical perspective as an art form and as a mirror of social institutions. Trips are arranged to both professional and amateur productions with attendance required in connection with some particular courses in theater. Elective offerings in the Speech Department cover all aspects of dramatic production and are open to the entire student body. The Memorial Auditorium serves as a laboratory for College theatrical activities. At least three major productions each year are produced by Players, the undergraduate, college-wide, dramatic organization. The program of this organization also includes workshop activities throughout the year and assistance to other producing groups on campus. Several courses require students to direct workshop productions. These may be done arena-style or in the small theater located in the College High School.

Assembly Programs

During the year a series of assembly programs is offered for the cultural benefit of students and faculty. These programs include presentations by outside artists and speakers, student government members and officers, student recitals and dramatizations. Since assembly programs are an important part of the college offering, students are urged to attend regularly. A Student-Faculty Committee plans the assembly programs.

Student Exchange with French and Spanish Speaking Countries

The College has a student exchange program in the field of modern foreign languages. Selected students, following their junior year, may be offered the opportunity to study abroad for a year in some foreign college or university under Montclair auspices. Students go to France, Canada, Spain, Mexico, or South America. This program is administered through the Margaret B. Holz Fund for Student Exchange.

College Athletics

The College maintains an intercollegiate and intramural sports program for men and women. The principal sports for men include football, basketball, baseball, track and field, cross country, golf, tennis, soccer, wrestling, bowling, fencing, and gymnastics.

The women's athletic activities include volley ball, basketball,

softball, tennis, golf, archery, fencing, bowling, field hockey, gymnastics, and track and field.

Varsity sports are administered by the Men's Athletic Commission which is composed of students and faculty members and by the Women's Recreation Association. For a complete description of the College's athletic program, activities, and facilities, see "Panzer School of Physical Education and Hygiene."

Student Publications

The Arrowhead is the student handbook. It supplies general campus information, policies, descriptions of organizations, songs, cheers and other material of special value to students.

The Montclarion is the weekly student newspaper covering a variety of subjects of interest to students. All Montclair State College undergraduates are eligible for staff positions.

Quarterly is the student literary magazine which publishes original contributions in literature and art. Staff positions are open to all undergraduate students.

La Campana, the College annual, is edited by the Senior Class, however staff positions are open to all undergraduate students.

Housing Accommodations

The College has five dormitories, each staffed by a full-time director. Chapin Hall, Russ Hall, and Grace Freeman Hall house four hundred women, and Stone Hall and Webster Hall house two hundred men. Increasing College enrollment has resulted in waiting lists for dormitory rooms. Therefore students desiring consideration for dormitory housing should write the Coordinator of Housing, Personnel Office for a dormitory application soon after being accepted to the College. The distance one lives from the campus is an important consideration in making selections for dormitory occupancy.

The regulations governing dormitory life and the opportunities for social affairs, entertainments, and athletics are determined and promoted by the Governing Board of the Women's Inter-Dormitory Association, the Council of the Men's Dormitories, the Coordinators of Housing, and the dormitory directors with emphasis placed on student participation and responsibility.

Students who cannot be accommodated in a dormitory are assisted by the Student Personnel Office in obtaining approved housing in private homes near the campus. Approval is not granted for single, undergraduate women to live in apartments.

Social Activities

A program of social and recreational activities is offered by the College. Dances, banquets, shows and other social affairs are sponsored by the Student Government Association, classes, fraternities and sororities, or clubs. Annual events such as Homecoming, the Christmas Dinner and Carol Sing, Cotillion and the All-College Carnival highlight the active campus life.

STUDENT PERSONNEL AND ACTIVITIES

Honor Societies, Fraternities, Sororities, and Clubs

A description of all honor societies, fraternities, sororities and clubs is found in *The Arrowhead*, the student handbook.

Who's Who in American Universities and Colleges

Each year a number of outstanding seniors are chosen for inclusion in this national listing. The selection is based on scholarship, participation in co-curricular activities, and character qualifications.

STUDENT PERSONNEL SERVICES

Student Personnel Division

The Student Personnel Division headed by the Dean of Students, includes Assistant Directors of Student Personnel, the Director of Admissions, the Registrar, the College Physician, College Nurses, and resident dormitory directors.

Responsibilities of the Student Personnel Division are: student counseling and advisement, veterans counseling, recruitment, admissions, registration, part-time placement, academic records and reports, health services, weekly calendar of events held on campus, co-curricular activities, scholarships, loans, and housing.

Student Counseling and Advisement

All members of the Student Personnel Division provide guidance and counseling services for students.

In addition, faculty advisers are assigned to all entering students. These advisers remain with the students for four years and assist them with curriculum planning and counsel them regarding their scholastic progress or deficiency.

Attendance and Absences

All students are expected to attend scheduled classes regularly. There is no official provision for "free cuts." The treatment and handling of any absences that do occur for personal reasons, including illness of less than two days, is within the jurisdiction of the individual faculty member. In the case of prolonged illness causing absences of two or more days, official permission to re-enter classes must be secured from the Medical Department. Official excuses are also issued by the Dean of the College for participation in College-sponsored field or athletic trips, but in such cases the student is still responsible for making up missed assignments.

Veterans Counseling

Any veteran who plans to attend Montclair State College should apply for a certificate of eligibility and entitlement at the nearest regional office of the Veterans Administration well in advance of registering at the College. In requesting this certificate, the veteran is advised to indicate clearly his educational objective since the Veterans Administration has established certain limitations especially with regard to change of curriculum or educational objective. At

STUDENT PERSONNEL AND ACTIVITIES

the time of each registration, the veteran should also consult with the College Veterans' Counselor to make certain that his certificate is in order and that he has taken the proper steps to expedite his education under the provisions of Public Laws 550 and 894.

Health Services

The College employs a full-time physician and three full-time nurses. The Medical Department, including the College Infirmary, is located in Edward Russ Hall and is under the supervision of the College Physician. The facilities and services of the Medical Department are available to commuters and dormitory students. The College Infirmary is staffed twenty-four hours a day. Students, at time of College entrance, must be examined by the College Physician to determine whether they are free from any disease or infirmity which would prevent them from teaching. An examination by the College Physician may be required of any student at any time to determine whether his physical condition warrants his continuance in the College. The College also requires all students, at time of entrance and during their freshman and senior years, to submit evidence of freedom from tuberculosis. All students who are positive reactors to a tuberculin test will be required to furnish an X-ray.

All seniors must have a physical examination prior to their student-teaching assignment. The results of this examination may be used to fulfill State requirements for certification if this examination is made within one year prior to graduation. The student may use his personal physician or be examined by the College Physician.

The College provides the services of two psychologists on a part-time basis. Appointments are scheduled by the Dean of Students.

Student Insurance

A Student's Medical Reimbursement Insurance Plan covering accident and sickness benefits is available for all students. The premium for one calendar year is \$16.00 and is payable in full in September. Students are encouraged to purchase this insurance and those on athletic teams are REQUIRED to have it. In the event of disability, the student should get instructions for filing the claim at the College Infirmary.

Parking

All students who are eligible to drive automobiles on the campus are required to register their automobiles and display a current decal according to the instructions which are issued by the Office of the Parking Director. Students must sign an agreement to observe all traffic and parking regulations. Failure to observe these regulations will result in the loss of parking privileges.

Because of limited parking facilities, dormitory students and students living within two miles of the campus are not permitted to park their automobiles on campus or on the streets in the vicinity of the College. Freshmen students will be required to park their cars in

STUDENT PERSONNEL AND ACTIVITIES

specially designated areas. Commuting students are encouraged to organize car pools and to use public transportation in order to conserve parking space.

SCHOLARSHIPS AND LOANS

All scholarships, loans and grants are coordinated by the College Scholarship Committee. Each application for aid is reviewed by the Committee to determine what financial assistance may be granted to a student who can meet the scholarship standards and demonstrate financial need. Students on scholarships must maintain a satisfactory scholastic average in order to be eligible for financial aid.

The Scholarship Committee at Montclair State College is always ready to assist students and parents in analyzing their financial problems and to offer advice and assistance.

All applications for financial aid should be submitted to the Office of Student Personnel unless otherwise indicated.

Additional information may be obtained from the Assistant Director of Personnel, Personnel Office, College Hall, Montclair State College, Upper Montclair, New Jersey.

New Jersey State Scholarships

Chapter 150 of the New Jersey Laws of 1959 provides for competitive college scholarships to be awarded to a maximum of five percent of each year's high school graduating class. Recipients of the scholarships will be selected on the basis of demonstrated financial need; high moral character, good citizenship, dedication to American ideals; and achievement on a competitive examination. State Scholarships are to the value of tuition at Montclair State College.

Awards are granted for a four-year period, renewable annually. Although students are eligible to apply for State Scholarships while they are freshmen in college, should they be granted an award they may not receive it beyond the period which usually comprises a four-year undergraduate program. This means that if a freshman applicant is granted a scholarship, he will receive stipends for a three-year period instead of four, in contrast to the four-year period of eligibility granted to high school seniors.

If a student is unable to begin his college work after receiving a State Scholarship, he may re-apply for a State award again the next year since he is still within a twelve-month period of his high school graduation. If he is unable to continue his college education once he has begun, he may request the Commission to grant him a leave of absence. A leave is granted for a six-month term and may, under certain circumstances, be renewed for one term. The student's period of eligibility to receive a State Scholarship is reduced by the time he is on leave in the same way as though he had remained in college attendance.

The scholarship legislation states that in order to renew an award, a student must have achieved satisfactory academic progress and

STUDENT PERSONNEL AND ACTIVITIES

must remain in full-time enrollment. It is necessary also for a holder to remain a resident of the State of New Jersey.

Awards are renewed in the summer time following the close of the regular academic year, when transcripts of the past year's work become available. After receiving college transcripts, the Commission office will notify students of the renewal of their awards.

Applications and other information may be secured from:

NEW JERSEY STATE SCHOLARSHIP COMMISSION
175 West State Street
Trenton 25, New Jersey

Student Work Program

The student work program was set up by the State of New Jersey to assist students in need of financial assistance in order to attend or continue their attendance at college. Under the student work program the student agrees to perform service of a designated nature for compensation at a specified rate.

Any student who demonstrates financial need and meets the work requirements of the college administration may be eligible. Holders of State Scholarships are also eligible for consideration under the student work program.

Guaranteed Bank Loan

Chapter 121 of the New Jersey Laws of 1959 provides for guaranteed or insured bank loans to qualified persons, for the purpose of assisting them in meeting their expenses of higher education in approved educational institutions. Recipients of such loans will be selected on the basis of demonstrated financial need, high moral character, good citizenship, and dedication to American ideals.

Any person may apply for a loan to the New Jersey Higher Education Assistance Authority if he has been a bona fide resident of New Jersey for 6 months, or longer preceding the date of his application for such a loan, and is 18 years of age or over.

National Defense Student Loan Program

The College participates in the Federal Loan Program which is described in the National Defense Education Act, Title II, Student Loans. Students are eligible to participate in this loan program provided there is evidence of need and satisfactory scholarship is demonstrated. Recipients of these loans are not required to begin making payments until one year following graduation from college. An amount equal to 10% of the loan is forgiven for each year of public school teaching in which the applicant engages. A total forgiveness of 50% of the original amount borrowed, representing five years of teaching, is possible under the provisions of the law.

The College does not take application for Federal loans until the prospective student has received an official letter of acceptance to the College. Additional information and application forms are avail-

STUDENT PERSONNEL AND ACTIVITIES

able from the Dean of Students.

New Jersey Bell Telephone Company Scholarships

Two \$200 scholarships are awarded annually to two students from the Junior or Senior Class. These scholarships are awarded to a New Jersey resident on the basis of financial need, scholarship, and demonstrated ability for teaching while at college.

Edward Russ Scholarship Fund

This fund was established from the residue of the estate of the late Edward Russ. Grants are made from income to assist deserving students who will make contributions to the profession of teaching.

Chapin Memorial Fund

This loan fund was established by the Alumni Association in honor of the late Dr. Charles Sumner Chapin, Principal of Montclair State Normal School. Loans are made principally to upper-class students on the basis of the candidate's personal and scholastic fitness for the profession of teaching and financial need.

John C. Stone Scholarship

This fund was established by the friends of the late Professor John C. Stone in memory of his contribution to education. The proceeds are used as a scholarship for junior and senior students who are mathematics majors.

Margaret B. Holz Fund for Student Exchange

The exchange student movement at Montclair was conceived and developed by the late Professor Margaret B. Holz, and it was in her memory that a fund was created. The proceeds of the fund provide financial assistance to those upperclassmen of the Modern Foreign Language Department who desire to study abroad.

Mark Andrews Scholarship Fund

This scholarship is established in the name of the Montclair Glee Club in memory of Mark Andrews. This award is made to an upper class student who is interested primarily in the teaching of choral music and who needs financial assistance.

Field Studies Fund

This fund was established by Dr. Harold S. Sloan, a former professor at the College. The interest on an investment of \$10,000 is used for the development of the work of the Bureau of Field Studies and for scholarships for defraying expenses of field-study courses.

Clarence O. S. Howe Memorial Organ Fund

The fund provides organ scholarships for upperclassmen from the income derived from this memorial to a friend of the College.

Part-Time Employment Service

The Personnel Office lists opportunities for part-time employment.

STUDENT PERSONNEL AND ACTIVITIES

Students interested in part-time employment should register in the office of the Dean of Students.

Employers are invited to list part-time job openings with the Dean of Students.

Panzer School of Physical Education Scholarships

Each year the following scholarships are awarded to students in the Panzer School of Physical Education and Hygiene:

Judge Esther Waterman Scholarship

The Judge Esther Waterman Scholarship of \$100 is awarded to a Freshman who exhibits the highest excellence, not in academic achievement alone, but also in other traits and characteristics.

Phi Eta Sigma Scholarship

The Phi Eta Sigma Scholarship of \$35 is awarded to a Junior woman who has exhibited high achievement in the field of Physical Education.

Adelphes Club Scholarship

The Adelphes Club Scholarship of \$100 is awarded to a woman who best represents the Big Sister ideal.

B. Croce Educational Society

The B. Croce Educational Society Scholarship of \$100 is awarded to the man with the highest achievement and leadership in the Sophomore year.

Teresa Farrell Scholarship

The Teresa Farrell Scholarship of \$25 is awarded to a Sophomore woman entering the Junior year with the highest scholarship standing.

Selections are made by a committee of Physical Education staff members.

Additional information may be obtained from the Director of the Panzer School of Physical Education and Hygiene, Chapin Hall, Montclair State College, Upper Montclair, New Jersey.

Announcement of recipients of scholarships is made in May.

Experiment in International Living

During the past five years the Student Government Association at Montclair State College has provided funds for two Junior students to participate in the Experiment in International Living during their summer vacation.

The average amount granted in the past for each student has been \$1,000.

All applications for Experiment in International Living must be filed before February 1.

Additional information and applications may be obtained from the Student Government Association, Inc., Life Hall, Montclair State College, Upper Montclair, N. J.

THE COLLEGE CURRICULA

The content, organization, and instructional procedures of the various curricula and courses are based on guiding principles adopted by the State Board of Education. These principles are in accord with those which Montclair has followed in developing its curricula. They have directed and unified the work of the staff in its selection, organization, and treatment of curricular materials.

These guiding principles are:

- The definite objective of a professional college makes certain requirements necessary, yet, insofar as practicable, the special interests of individual students should be recognized.
- After the major and minor fields of specialization have been chosen, there should be comparatively little opportunity for free elections.
- Each curriculum should provide a basis of required background courses and professional activities.
- Each curriculum should provide for an understanding of the aims and organization of education in the appropriate levels and for guidance and skill in selecting, organizing, and presenting instructional materials.
- Each curriculum should make adequate provision for specialization.
- Subject matter should be treated professionally.
- The courses and activities in a given curriculum should be sequential and integrated.
- Courses should be broadly humanizing and should be related to what takes place in society and what is done in school.
- The demonstration school should be the laboratory and integrating center of all courses and all curricula.
- General educational theories and techniques should be exemplified in regular class instruction and frequently demonstrated in the laboratory school.
- The relative value of the elements of the professional instruction should be checked by the strengths and weaknesses of the college product.
- The curricula and courses of the College are the servants of a changing society, and therefore, should be subject to continual adjustment.

FIELDS OF INSTRUCTION

The general instructional division of the College has three functions. The first is to provide each student with a rich background. The second is to provide professional subject matter which includes sound standards of scholarship. The third is to provide theories and techniques and their application in teaching.

General Education

General Education is that phase of education which prepares the individual for purposeful and responsible citizenship in a free society as distinguished from that which prepares him for a profession or occupation. Courses in communication, the humanities, science, mathematics, social studies, health and physical education are included.

Every teacher who can recognize the many-sided interests of his students must have a broad philosophy of life and an interest in the life experiences of youth. Furthermore, every teacher who specializes in a field of knowledge must be familiar with the interests,

activities, and problems of society as they relate to the specialization. Therefore, the College recognizes that each student must be familiar with social, political, economic, industrial, scientific, religious, literary, and aesthetic phases of life, and that this background should be a body of related knowledge not a collection of isolated parts.

Such professional-cultural background courses comprise more than one-third of the total college requirements for graduation.

Specialization

Specialization is built upon the related and fundamental body of knowledge acquired in general education and provides a command of subject matter in the major field. Opportunities are provided so intellectual curiosity will be stimulated, which leads to individual scholarship.

The student is required to complete a minimum of thirty semester hours in his major field in addition to the educational requirements of all students. It has been college policy to treat subject matter professionally. This requires not only an academic knowledge of subject matter but also a teaching knowledge of that same subject matter.

Basic and Specialized Professional Education

The principles and needs of professional education are covered adequately under the Department of Education, page 58.

SUMMARY OF COURSE REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE

I. GENERAL EDUCATION			48 s.h.
A. Language Communication			6 s.h.
Eng. 100C	Fundamentals of Writing	3	
Speech 100D	Fundamentals of Speech	3	
Possible Substitutions on recommendation of department concerned.			
Eng. 103	English Composition	3	
Eng. 408	Creative Writing	2	
Speech 103	Voice & Speech Improvement	3	
Eng. 310	Journalism	2	
B. Social Studies			12 s.h.
S.S. 100 A&B	Development of World Civilization	6	
S.S. 200 A&B	Contemporary American Life	6	
Substitutions or advanced standing-placement may be made on recommendation of the Social Studies Department from the list of courses offered by the department.			
C. Sciences and Mathematics			12 s.h.
To be selected from:			
Sci. 100A	Physical Science	4	
Sci. 100B	Biological Science	4	
Sci. 100C	Earth Science	2	
Math. 300	Social Uses of Mathematics	2	
Math. 400	Elements of Statistical Reasoning	2	

THE CURRICULA

Math. 307	An Introduction to Mathematical Statistics	3
Math. 310	An Introduction to Mathematics	2
Sci. 418	Three Centuries of Science Progress	3
Sci. 422	Consumer Science	2

Substitutions or advanced standing-placement may be made on recommendation of the Mathematics or Science Departments from the list of courses offered by the departments.

D. Humanities		12 s.h.
Eng. 100G	Western World Literature	3
F.A. 100	Introduction to the Visual Arts	3
Music 100	Music Appreciation	2
Lang. 300	Foundations of Language	2

Elective to be chosen from the list of courses offered by the Humanities Departments. Substitutions or advanced-standing placement may be made on recommendations of the department concerned.

E. Physical and Mental Health		6 s.h.
H.E. 100	Healthful Living	2
Phys. Ed. 100 A&B	Physical Education Activities	1
Phys. Ed. 200 A&B	Physical Education Activities	1
Ed. 100	Mental Hygiene and Personal Adjustment	2

II. PROFESSIONAL EDUCATION		15 s.h.
Ed. 201 & 202	Human Development & Behavior	6
Ed. 303	The Teacher in School and Community	3
Ed. 401	Development of Educational Thought	3
Elective in Professional Education		3

III. SPECIALIZATION (Major and minor subject including student teaching and specialized professional. For major and minor sequence requirements see outline in the section of department concerned).		53 s.h.
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IV. ELECTIVES		12 s.h.
TOTAL		128 s.h.

THE LABORATORY SCHOOL

College High School

College High School is an integral part of the College's program of teacher education and educational research. Located in a building equipped for the regular classes and activities of a six-year high school, it serves the College faculty as a continuously available testing ground for theory and procedure. Here, also, prospective teachers have opportunities for systematic observations of classroom problems and for the detailed study of the individual adolescent.

A special feature of the laboratory school is its intimate coordi-

nation with the College curriculum. In many instances, College methods classes are conducted as theoretical preparation for demonstrations in the College High School classroom where the human element inevitably becomes the final arbiter of educational values. The closest possible correlation of theory and practice is, thus, achieved. Teacher preparation and educational research gain a realistic foundation in their observed benefits to youth of high school age.

Organizationally, too, the College High School is a component part of the total program of teacher education. The Director, who plans and administers the six-year secondary curriculum, is also a teaching member of the faculty. Chairmen of subject-matter departments of the College also serve as chairmen of the corresponding departments of the College High School. College faculty members are responsible for high-school instruction.

CREDITS AND STANDARDS

Credits

The College is organized on the semester basis. A semester hour is to be interpreted as work done in the classroom for one hour a week during a period of eighteen weeks. The average student load for any one semester is sixteen semester hours of prepared work a week. Thirty-two semester hour credits should be earned during each college year. A total of one hundred and twenty-eight semester hours is required for graduation. Permission to carry more than the customary amount of work is granted only to those who have demonstrated marked ability. It is definitely understood that students are retained in the College only so long as they do satisfactory work.

Rating System

Marks indicating degrees of achievement in the various courses are given in letters, A. B. C. D. and F.

A—Excellent

F—Failure

B—Good

Inc.—Incomplete Work

C—Fair

WP.—Withdrawn, Passing

D—Poor

WF.—Withdrawn, Failing

Where a student has had an unavoidable absence, or for reasons in accord with approved policy, a course may be marked "Incomplete" at the end of a semester. This mark must be removed by a final grade within six weeks, or the course cannot be credited and the mark becomes "F".

Degree and Certificate

After satisfactory completion of all requirements for graduation the degree of Bachelor of Arts is granted.

Those who complete requirements for a degree at Montclair State College also qualify for a standard certificate to teach the subjects of the major in grades 7-12 in the schools of New Jersey and for certain major subjects in the elementary schools. The Montclair graduate is eligible for a Limited Secondary Certificate.

THE CURRICULA

Scholastic Standards

Montclair's academic standards are based on the principles to which the college is dedicated.

One of these principles is a cornerstone in Montclair's professional edifice. From the beginning, Montclair has emphasized the twin areas of preparation for teaching, a thorough knowledge of a field of subject-matter interest, and a mastery of educational principles to teach the subject-matter effectively.

Another principle, of equal importance, emphasizes the necessity for co-operative activity among the three major divisions of the college community—the administration, the faculty, and the students. Each must assume responsibility for seeking the best ways and means for obtaining the best results, and each must be resolved to maintain the standards thus established.

To produce teachers of high quality, Montclair is primarily concerned about admitting only those students who subscribe to the attitudes and standards needed for becoming first-rate teachers, which are the following:

First, the student should commit himself wholeheartedly to the high calling of Montclair's professional objective—mastery of subject matter, on the one hand, and mastery of professional skills (methods) and know-how (function of school and education in terms of individual, community, national, and global needs), on the other hand.

Second, since Montclair's students are carefully selected as prospective teachers, it is to be expected that they will use in all their work the skills of reading, writing, and speaking adequately, and that they will give evidence of this ability at all times.

Third, the students should recognize that there is a growing demand for the well-rounded person with as many of his abilities developed as possible, that exclusive interest in a major field is narrow and self-defeating, and that required courses in fields other than the major are broadening.

Fourth, he must realize that marks are not ends in themselves, but, as symbols, they are indicative of individual capacity in relation to achievement.

Fifth, he should insist upon quality performance in each course, both in subject-matter and education, trying always to increase the excellence of his understanding and performance.

Sixth, he should strive to manifest academic and professional growth from course to course.

Seventh, he should seek opportunities to choose courses not in terms of personal expediency but in terms of best professional growth, as he envisions the need for teaching young minds to embrace a global perspective and global obligations.

Eighth, he should welcome, whenever possible, opportunities to participate in those co-curricular activities that offer contact with the rich cultural resources of this metropolitan area.

Not only students, but administration and faculty also, are required to maintain academic standards. The administration assumes the responsibility of recruiting and maintaining a faculty of highest quality; the faculty assumes the responsibility of organizing and preserving, to the best of their ability, professionalized subject-matter of highest quality; the students assume the responsibility of respond-

ing to that presentation to achieve results of the highest quality.

Montclair's academic standard is one of large commitment, inspired by past achievement, spurred by current performance, and fired by the vision of the future.

Comprehensive evaluation of the student's academic standing is indicated in his grade point average. The numerical equivalent for determining grade point average follows: A, +4; B, +3; C, +2; D, +1; F, 0.

Students must maintain cumulative grade point averages:

For sophomore standing, the student must have completed at least 26 credit hours with a 1.6 average.

For junior standing, 58 credit hours with a 1.8 average.

For senior standing, 90 credit hours with a 2.0 average.

The grade point average is determined by dividing total grade points earned by total number of semester-hours, passed or failed.

Transfer students will not be accepted unless they have a cumulative grade point average of at least 2.0. Transfer credit will not be allowed for letter grades below "C".

Scholastic Honors

Students graduating with point averages of 3.45 or better for all undergraduate courses completed at Montclair are recognized as honor students with the following designations:

Average of 3.45 - 3.64 - *cum laude*

Average of 3.65 - 3.84 - *magna cum laude*

Average of 3.85 - 4.0 - *summa cum laude*

Requirements for Graduation and Bachelor of Arts Degree

A major requiring a minimum of thirty semester hours.

A minor of eighteen to twenty-one semester hours leading to certification to teach the additional subject of the minor may be completed in some curricula by use of elective options.

Additional credits in required and elective work to total one hundred twenty-eight semester hours.

Two semester-hours of work in physical education.

A minimum of twenty-four semester-hours of resident work which must be completed during the student's final year at College.

A minimum of 150 clock-hours of student teaching to satisfy the State requirements.

Completion of one week of outdoor education program as scheduled at the New Jersey School of Conservation, or its equivalent.

A final grade point average of at least 2.0.

Reports of progress at mid-term each semester are given by faculty for the purpose of advisement to students who may not be doing satisfactory work. These reports are collected by the Dean of Students and are referred to the faculty advisers for use in consultation with students. In the case of serious deficiency which may endanger a student's retention in College, notice is given to the student's parents or guardians informing them of the situation.

THE CURRICULA

Probation

Any student whose grade-point average for a semester or for the cumulative record falls below the 2.0 mark is placed on probation for the succeeding semester. This is in the nature of a warning that work must be improved in order for the student to be retained in the College. Usually students are not permitted to remain in College on probation for more than two consecutive semesters.

Each semester the records of the students on probation are reviewed by the Dean of the College and the Dean of Students in consultation with the adviser and chairman of the student's major department. Students may be dropped from College for failure to attain the standards noted above. Students who are on probation are not permitted to engage in intercollegiate competition on varsity sports teams.

The parent or guardian is notified whenever a student is placed on probation or dismissed from the College for low scholarship. If the student is twenty-one years of age or over or is independent of parental supervision and support, he is excluded from this policy.

HONORS PROGRAM

In the fall of 1960 an Honors Program was inaugurated. Freshmen qualifying for Honors are exempt from the elementary *Fundamentals of Writing* (English 100C) and *Western World Literature* (English 100G) courses, generally required, and instead read extensively and intensively great works of world literature in the course, English 100A and 100B, *World Literature*. The course, Social Studies 100A and 100B, *Development of World Civilization*, also entails work of quality and extent beyond that of regular freshmen. Otherwise, Honors freshmen pursue the regular courses of their respective majors.

PROFESSIONAL BACKGROUND COURSES

GENERAL EDUCATION

The objectives and philosophy of the courses in general education have been discussed in the section headed "Fields of Instruction." The outline of curricular requirements shows that forty-eight semester-hours out of the total of 128 semester-hours required for graduation are included in the requirements for general education.

These courses are grouped in four principal areas as follows: Social Studies, Humanities including communications, Mathematics and Sciences, and Mental and Physical Health. The course descriptions indicate the contributions of each one to the development of the general cultural background deemed a necessary part of the preparation of every teacher regardless of level of teaching or of subject specialization to be taught. The order of inclusion of these courses in each curriculum is found in the outline of sequence of courses under each major department.

GROUP I. Social Studies

There are four (4) courses in the social studies required of all students regardless of their major area of study.

Soc. St. 100A and 100B. The Development of World Civilization**Cr: 3 s.hrs. each**

Using the historical approach for the study of present world cultures, it includes examples from Western and Eastern Civilization.

Soc. St. 200A and 200B. Contemporary American Life**Cr: 3 s.hrs. each**

This two-semester course introduces the student to a broad area of social science. An attempt is made to acquaint students with the basic premises of our democratic society, as well as nature and structure of our social, economic, and political institutions and the relationships which exist among social, economic, and political problems.

In the presentation of this course, the usual classroom procedures are supplemented by the requirement that each student gain some knowledge through his own investigation of and participation in community affairs.

GROUP II. Humanities

There are seven courses required in this group. These are concerned (1) with furnishing materials of background and critical principles that insure a knowledge of the great masters of literature, art, and music of the world; appreciation of the literary forms which they created; and a feeling for the best in modern life and thought, and (2) with developing the power of communication in speech and writing.

Eng. 100C. Fundamentals of Writing**Cr: 3 s.hrs.**

Competence in finding, understanding, organizing, and expressing ideas and supporting information is the prime objective. Deficiencies in writing habits receive individual attention. Eight compositions and a concluding research paper are required.

Speech 100D. Fundamentals of Speech**Cr: 3 s.hrs.**

This basic course is designed to help the prospective teacher to improve his ability in speaking. Effective voice production and clear, pleasing diction are developed through speech activities. The work is adapted to the individual needs of the students as revealed by phonograph recordings and diagnostic tests. The work may include prescribed additional practice in the speech laboratory. Failure to achieve an acceptable standard of performance results in the withholding of credit until the student demonstrates satisfactory achievement.

Eng. 100G. Western World Literature**Cr: 3 s.hrs.**

Representative selections of literature typifying each of the major cultural epochs of the Western World—Hebrew, Graeco-Roman,

THE CURRICULA

Medieval, Renaissance, and Modern—are read intensively. This reading becomes the core of extensive study, as relationships from culture to culture and age to age are identified and established.

Lang. 300. Foundations of Language

Cr: 2 s.hrs.

The purpose of this course is to give every student, as a prospective teacher, (1) a survey of the background, growth, and structure of the English language from its Indo-European origin to modern times, (2) an introduction to the science of linguistics, (3) an appreciation of several foreign language patterns, and (4) a rich fund of information in the field of general language.

F. A. 100. Introduction to the Visual Arts

Cr: 3 s.hrs.

This course is required of all students except those majoring in fine arts. The ways in which man has expressed himself in the many forms of the visual arts including painting, ceramics, sculpture, weaving, print making, architecture, the theater, motion pictures, and photography, are explored through studio work, demonstrations by artists and craftsmen, reading, discussion, and trips to art sources. Emphasis is placed upon the development of an understanding of the nature of art and the experiences of art, their significance to the individual, and their role in a culture.

Mus. 100. Music Appreciation

Cr: 2 s.hrs.

This course aims to help the student discover music and to use it as a force in life enrichment. Emphasis is placed upon stimulating the enjoyment of music rather than on building up a body of facts about it. By means of musical performance by the instructor and students and by directed listening to recorded music and to radio and television, the student is acquainted with masterpieces of music which should be the possession of every generally cultured person.

Required Elective in Humanities

In addition to required general education courses in the humanities each student is required to select one two-point elective in this area of work. Students will make selections from elective offerings.

GROUP III. Science and Mathematics

As his cultural background in science, the student surveys the earth sciences (100C), and either physical science (100A), or biology (100B).

Sci. 100A. Physical Science

Cr: 4 s.hrs.

This course deals with the basic scientific discoveries which have created present-day activities in the fields of astronomy, atomic energy and meteorology. The social, economic, and educational consequences of these discoveries and the industries growing out of them are treated in such detail as to be of service to prospective teachers of social studies, English, languages, and other subjects.

Sci. 100B. Biological Science

Cr: 4 s.hrs.

The organization and behavior of plants and animals are treated in a manner devised to develop understanding of man's structure and behavior. Mechanisms of heredity and evolutionary change are considered. An understanding of how a balance may be achieved among living things is developed to show desirable land use and good agricultural and forest practices. Class lectures and discussions are supplemented with slides, moving pictures, laboratory experiments, and field trips.

Sci. 100C. The Earth Sciences

Cr: 2 s.hrs.

Land forms and water bodies are treated from the standpoint of origin and evolution, and, together with the atmosphere, are considered in relation to their influence upon life and activities. The laboratory work consists of the study of topographic maps, models, and other methods of illustration.

Math. 300. The Social Uses of Mathematics

Cr: 2 s.hrs.

This course is concerned with mathematical concepts that help the student to become more effective in his daily living. Among the topics covered are: the fundamental processes of arithmetic and elementary algebra, percentage, simple and compound interest, consumer credit and installment buying, savings and investments, mortgages, pensions, annuities, social security, taxation, and insurance.

Math. 400. Educational Statistics

Cr: 2 s.hrs.

This course is concerned with the basic concept of statistical reasoning as it contributes to an understanding of today's social, economic, and educational problems and theories. Covered is descriptive statistics: the systematic organization, analysis, and presentation of data. Sampling theory, including the application of the binomial, Poisson, and normal distribution. Finally, there is an introduction to the general problem of statistical inference, including the use of confidence intervals, test hypotheses, and decision theory.

Required Elective in Mathematics or Science

In addition to the required general education courses in mathematics and science, each student is required to select one two-point elective in either mathematics or science. Students will make selections from elective offerings.

GROUP IV. Mental and Physical Health

Ed. 100. Mental Hygiene and Personal Adjustment

Cr: 2 s.hrs.

For a description of this course, see page 61.

Health Ed. 100. Healthful Living

Cr: 2 s.hrs.

The purpose of this course is to aid the student in achieving and maintaining optimum health and to understand the principles on

THE CURRICULA

which it is founded. Among the topics covered are: prevention and treatment of diseases, grooming, nutrition and weight control, the effects of alcohol and narcotics, marriage and parenthood, and the community aspects of health.

Phys. Ed. 100A and 100B. Physical Education Activities

Cr: $\frac{1}{2}$ s.hr. each

The freshman year consists of an orientation program whereby students are provided with an opportunity to become acquainted with a variety of team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Phys. Ed. 200A and 200B. Physical Education Activities

Cr: $\frac{1}{2}$ s.hr. each

The work of the sophomore year permits the student to select, within a given pattern, team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

THE DEPARTMENT OF EDUCATION

Morehead (*Chairman*), Atkinson, Brower, Buchner, Davis, Floyd, Fuchs, Gallagher, Garland, Gorman, Gregg, Harmon, Hauer, Jump, Lewin, Lutz, Peckham, Richardson, Runden, Salt, Seidman, Walter

Even though the principal function of the entire College is educational, there is a Department of Education which integrates the work of the entire College by coordinating all the professional aspects of training such as subject-matter, teaching techniques, observation, and student teaching. The Department carries out its responsibility through: the courses in education and psychology, the College High School, the student teaching program and other professional experiences, and the placement and professional adjustment services. The work of these agencies transcends all departmental lines; the special interests and functions of any one department contribute to the professional aims of the institution which are broader in scope and purpose than those of any of the subdivisions of the College.

Since the main purpose of the College is professional, departmental aims are identical or similar. Hence the aims of the Department of Education are not exclusively its own. Its chief and particular function, however, is to assist and to give leadership in the following ways:

- (1) It helps the prospective teacher to take an intelligent and active part in his own personal and professional orientation.
- (2) It arouses an awareness of the possibilities of the profession of teaching as an opportunity to invest one's interests and powers in promoting the social good.
- (3) It gives an understanding of both elementary-school and high-school students, their natures, interests, and needs.
- (4) It provides for a gradual induction into the profession of teaching by means of a carefully arranged sequence of education courses, by

PROFESSIONAL BACKGROUND COURSES

observation of and participation in school classwork.

- (5) It directs the student as he becomes an active and responsible teacher in the student-teaching program.
- (6) It provides an analysis of the student-teaching experiences.
- (7) It aids in coordinating the work of the college departments through its integrating functions.
- (8) It provides training which will aid the student in taking an active part in the extracurricular life of the school and in community life.
- (9) It gives a forward look into the profession so that it shall be regarded as a worthy, life-time vocation.

The Department not only promotes the professional aspect through its materials and organization, but supplements the work of professionalization of all the departments.

ORGANIZATION AND ACTIVITIES

The required courses in education have been designed to give a survey of the essentials of the professional aspects of teaching. Five points of view are emphasized: the sociological, the biological, the psychological, the pedagogical or technical, and the philosophical. Although in a given semester course only one or two of these fields receive special emphasis, the content is not limited to them. There is rather the attempt throughout to conduct an integrated treatment of professional problems.

Special attention has been given to the sequence of the required courses and to the units within courses. In so far as it is administratively possible and expedient, courses in education parallel those in other departments. In this way the various departmental courses reinforce and supplement each other.

In the organization of all courses the needs of society and the needs and interests of the students are considered. Content material is taught, not as detached from the student's everyday world, but as part of his professional life in pre-service training. Both logical and psychological organizations are utilized, the former for completeness and unity, the latter for vitality.

The work in psychology includes some opportunity for firsthand observation of children and adolescents in their homes, on the playground and in other out-of-school settings, and in school. The aim is to acquaint the student, through various means, with the stages in normal development from infancy through adolescence. An effort is made to build an understanding of what is involved in the psychological development of the individual and a basic understanding of the needs of children and adolescents together with some insight into the resources through which these needs may be satisfied. Special emphasis is given to the problems encountered in school situations.

Observation and participation in College High School occupy a large place in the courses in education. It is through personal contact with pupils and with actual school conditions that an understanding of the meaning of educational theory is developed.

THE CURRICULA

Principally for the purpose of orientation, freshmen are assigned to a limited number of observations in College High School. An organized experience in community social agencies is required as part of the pre-professional education of all students. This normally takes place during the freshman year.

Sophomores are assigned to the study of specific, individual College High School students.

Juniors are assigned by their major departments to specific demonstration teachers for a series of carefully planned observation and participation experiences. Also, all juniors spend one week, full-time, in a public school observing and participating in the teaching.

Seniors are assigned to the College High School demonstration classes taught by their special departmental methods course instructors. During the senior year the emphasis is on relating the activities of the demonstration class to the work done in the methods courses.

Immediately preceding the work in student teaching offered in the senior year, a course in the *Development of Educational Thought* is given. The major purpose of this course is to study those basic and fundamental principles that should guide our secondary schools.

STUDENT TEACHING

Ten weeks of student teaching in the public schools of New Jersey are required of all students who complete the regular program of graduation requirements. For some departments this period is divided between the junior and senior years; for other departments all student teaching is reserved for the senior year.

The purpose of student teaching is to give the student an opportunity to relate theory to practice under skilled supervision; to offer a chance to evaluate his own strengths, weaknesses, and personal and professional needs; and to determine his readiness for responsible membership in the teaching profession.

Each student is assigned to an experienced teacher in a secondary school. In addition, students whose certification majors also include the elementary school are assigned to a qualified elementary-school teacher for a comprehensive experience covering all grade levels. While student teaching, the student is required to assist, observe, and participate in all regularly scheduled school activities and to follow the daily and vacation schedules as determined by the local school. Wherever feasible assignment is made to schools within daily commuting distance of the student's home; however, students must accept assignment in any community designated by the College.

Following the student-teaching internship, the student returns to the campus for further study in professional and academic courses.

PROFESSIONAL BACKGROUND COURSES

During student teaching, the student is visited by supervisors from both the subject matter and Education departments. As an additional means of improving teaching ability, group and individual conferences are held on the campus during the period of internship.

REQUIREMENTS FOR ASSIGNMENT TO SENIOR STUDENT TEACHING

A student must meet the following requirements for student teaching in the senior year:

1. Approval by the department chairman based upon the following considerations:
 - a. A cumulative grade point average of 2.0 at the close of the semester immediately preceding student teaching
 - b. A cumulative grade point average of 2.0 in the major field of specialization
 - c. Satisfactory completion of the methods course in the major area
 - d. No grades of "Incomplete" or "F" in a major area.
2. Approval by the Chairman of the Education Department.
3. Approval by the College physician signifying that the student is in good health and free from any disease or physical defects which might interfere with success as a teacher.
4. A College record free from personal and social qualities considered undesirable for the teaching profession.

REQUIRED COURSES

Courses numbered EDUCATION 100, 201, 202, 303, 304 (or 304X for those who will be certified to teach Kindergarten through twelfth grade), 401, 403, and a *three-point education elective* are required of all students; courses numbered otherwise are elective.

DEPARTMENTAL COURSE OFFERINGS

Ed. 100. Mental Hygiene and Personal Adjustment **Cr: 2 s.hrs.**

The course in mental hygiene and personal adjustment offers an accumulation of suggestions from psychological, biological, sociological, and educational literature which the college student may use in building his personality with the facilities available on the campus. Problems of human relationships and general orientation in college and in life are discussed.

Ed. 201 and 202. Human Development and Behavior, Part I and Part II **Cr: 3 s.hrs. each**

These courses survey the psychological aspects of development and behavior from the prenatal period through adolescence. Emphasis is placed upon physical, emotional, intellectual, and social growth and development; the learning process with applications to educational situations; personal and social adjustments, as they are found in the

THE CURRICULA

home, school and community; guided observations of individual children and adolescents, to furnish substance to classroom discussions and to help the student gain understanding of human behavior.

Ed. 303. The Teacher in School and Community **Cr: 3 s.hrs.**

This course provides the prospective teacher with a knowledge and understanding of the following areas of professional concern: (1) the organization and role of the public school in American society; (2) the nature of teaching as a profession; (3) the evolving role of the school in community improvements; and (4) the function of the teacher in school-community relations.

Ed. 304. Principles and Techniques of Secondary Education

Cr: 3 s.hrs.

This course provides a basic orientation in the following areas of professional concern: (1) the teacher's role in the teaching-learning process; (2) sources, selection, and use of teaching aids; (3) routine activities and auxiliary responsibilities of the teacher; and (4) development and maintenance of desirable pupil behavior.

Majors in subjects providing certification in elementary and secondary schools will take the following course in place of Ed. 304.

Ed. 304X. Principles and Methods of Teaching

Cr. 3 s.hrs.

This course is concerned with principles and methods of teaching at all grade levels, elementary and secondary. Points of similarity and difference in teaching at various levels are stressed.

Ed. 401. The Development of Educational Thought

Cr: 3 s.hrs.

The purpose of this course is to study the major philosophical traditions and their educational implications in order to assist the student to develop his own philosophy of education. These philosophical traditions are studied in their historical and contemporary perspectives through texts and supplementary readings.

Ed. 403. Supervised Student Teaching

Cr: 8 s.hrs.

Ten weeks of student teaching in the public schools of New Jersey are required of all students who complete the regular program of graduation requirements. A complete description is given on page 60.

Ed. 404. Co-curricular Activities in the Secondary School **Cr: 3 s.hrs.**

This course is designed as an introduction to that part of the total school program falling outside of the area of regularly scheduled classes. A study is made of the role of the faculty advisor. The more usual co-curricular activities are considered.

Ed. 405. Teaching the Block-of-Time Program in the Secondary School

Cr: 3 s.hrs.

Following a study of the philosophical and psychological bases of

PROFESSIONAL BACKGROUND COURSES

the block-of-time program, major emphasis is placed on the methodological problems involved in teaching the program and the development of resource units for use at different levels.

This course is open only to those students who have a major-minor combination of English and social studies.

Ed. 406. Educational Sociology

Cr: 3 s.hrs.

This course deals with the application of sociological principles to educational problems. The school is treated as a part of the community, and the various social forces that affect the school and its administration are considered. The following topics are included: family backgrounds, community organization, social breakdown, social mobility, socialized classroom methods, and the social approach to individual behavior difficulties.

Ed. 408. Selection and Utilization of Audio-Visual Materials

Cr: 2 s.hrs.

Sources, selection, and evaluation of audio-visual materials are studied in this course. Techniques in developing individual reference catalogs of audio visual materials are stressed. The production of school-made aids is also an important aspect of the course. The use of the latest audio-visual equipment is demonstrated.

Ed. 409. Radio and Sound Equipment in the Classroom

Cr: 2 s.hrs.

This course trains teachers and school executives in the use of radio programs, amplifying systems, recording equipment, and record players. Actual practice is given in the use of these educational aids. Problems of script-writing, microphone and recording techniques, and program directing are considered. The class visits radio stations for equipment and program observation. Each student develops a teaching unit using radio or sound equipment to vary, vitalize, and improve educational practices.

Ed. 410. Teaching Materials Workshop

Cr: 2 s.hrs.

This course is for those persons who wish to study advanced problems in the utilization and administration of audio-visual materials. Individual research is stressed, and there is an opportunity to work out individual projects. Such problems as budget requirements, administrative set-up, establishment of film libraries, etc., are emphasized. It is assumed that the student will have taken ED. 408 or will have had the equivalent in practical experiences.

Ed. 411. Educational Motion-Picture Workshop

Cr: 2 s.hrs.

This course includes various phases of the planning and production of educational motion pictures. Students receive actual experience in scenario writing, costume research, set designing, lighting, photography, editing, and sound recording. During the course an educational film is produced as a class project.

THE CURRICULA

Ed. 415. Seminar in the Problems of a Classroom Teacher Cr: 3 s.hrs.

This seminar deals with the problems commonly encountered by beginning teachers. It considers problems of classroom management, student behavior, teaching methods, teaching materials, curriculum adaptations, and the relation of the teacher to the total school community. It provides each student with an opportunity to analyze, evaluate and discuss student-teaching experiences. It makes provision for planning the student's approaching employment as a teacher.

Ed. 440. Camping and Outdoor Education Cr: 2 s.hrs.

The purpose of this course is to familiarize the students with camping and outdoor education as methods utilized by the schools of America. The aims and methods of camping are studied, and consideration is given to the communities that have active camping and outdoor education programs in operation. The course also helps prepare the student for positions in summer camps. This course is usually given at the New Jersey State School of Conservation, Stokes State Forest.

Ed. 441. Conservation Education Cr: 2 s.hrs.

Designed to give teachers and prospective teachers a background for organizing and teaching conservation on various grade levels, the need for conservation, the various kinds of natural resources, and some of the modern methods for using and renewing these resources are considered. Field trips, laboratory experiences, visual aids, printed materials, and visiting specialists combine to make this useful for all teachers.

Ed. 442. Practicum in Camp Leadership Cr: 2 s.hrs.

In this course the student has an opportunity to learn the techniques of camp leadership through practical experience, guided group study, and discussion. The practical experience comes through serving as a camp counselor in an actual camp situation. During this practical experience there are regular discussion sessions and assigned readings which help the student to gain a background of knowledge to deal with the practical problems as they arise.

Ed. 444. Practicum in Conservation Education Cr: 2 s.hrs.

This course is designed to provide teachers and supervisors with a background of experience and knowledge which will enable them to organize and conduct conservation education programs in their own communities. Using an extensive library of conservation educational material, students formulate teaching units, lists of teaching aids, and projects suitable for use in their own communities. Participating in conservation projects with the children in the demonstration camp furnishes a practical background for research and discussion.

PROFESSIONAL BACKGROUND COURSES

Prerequisite: ED. 441, *Conservation Education*, or SCI. 412, *Field Studies in Science: Biological*, or SCI. 413, *Field Studies in Science: Physical*, or the equivalent.

Ed. 450. Psychological Foundations of Personality **Cr: 3 s.hrs.**

This course is concerned with the physical, mental, and cultural factors influencing personality development. Such topics as the nature of personality, mental health and patterns of deviation, and evaluation are considered.

Ed. 451. Guidance for the Classroom Teacher **Cr: 3 s.hrs.**

Designed as an introduction to the field of guidance for teachers who are concerned with problems of guidance and human relations in the classroom, this course also gives the new teacher a picture of the place of guidance in the modern school, to indicate the techniques by which guidance is accomplished, and to identify some of the tools of the guidance counselor.

Ed. 452. Psychology and Education of the Handicapped **Cr: 3 s.hrs.**

This course is for the preparation of teachers of handicapped children and youth. It orients prospective teachers of regular classes to the special needs of those with handicaps of sensory, motor, intellectual, emotional, and neurological origins. Both the theoretical psychological aspects and the practical applications to the classroom are studied. The course includes analysis of case material.

Ed. 453. Social Psychology **Cr: 3 s.hrs.**

The course focuses on the social behavior of the individual and the group. Attention is given to social perception, motivation, and learning; attitudes and values; the development and dynamics of social groups; intergroup tension and prejudice; and psychological approaches to public issues.

Ed. 461. The Junior High School Curriculum **Cr: 3 s.hrs.**

Recent trends in the development of the junior high school curriculum and the relation of the curriculum to the aims, function, and organization of the junior high school are covered. Curriculum patterns in representative junior high schools are studied and evaluated. An opportunity is given to each student to develop units of work for junior high school subjects in the major of his choice.

Education 462. Survey of Reading Methods in Secondary School Subjects **Cr: 3 s.hrs.**

Planned especially for the inexperienced teacher in all subject matter areas, this introductory course outlines the role good reading plays in achieving both academic and personal success in every aspect of school life. New teachers will want an overview of: the physiological, psychological, and sociological factors in reading; resources

THE CURRICULA

available to the reading-minded teacher; and the school's responsibility for helping the student build an inventory of reading skills by utilizing reading opportunities in the entire curriculum.

Education 463. Reading and the Improvement of Study Skills

Cr: 3 s.hrs.

This is a course designed to prepare teachers to help junior-senior high school students to achieve greater effectiveness in their reading-study habits. After examination of recent materials and research, the class develops a series of practical methods for teaching and learning: the SQ3R approach, the best methods for taking examinations, the application of reading to problem solving, the development of memory and concentration, and the various techniques for taking and organizing reading notes, and the reading of homework assignments. (Not open to those who have taken EDUCATION 530C).

Education 464. Foundations of Reading Instruction

Cr: 3 s.hrs.

In this course methods and materials currently in use in elementary reading programs are studied with a view toward increasing the power of both the teacher and the learner. How the reading process begins, and how it is reinforced are topics fundamental to all upper grade teachers who are faced with the problem of continuing reading skills development in all curriculum areas. (Not open to those who have taken EDUCATION 532).

Education 465. College Reading and Study Improvement Laboratory

Cr: 3 s.hrs.

This workshop course is designed for college students who feel that reading-study problems are interfering with their normal school progress. Students engage in supervised practice experiences which promote vocabulary growth, more flexible reading speeds, comprehension and recall improvement, skimming competency, and better interpretative and critical reading techniques. Particular attention is given to reviewing for examinations, keeping up with daily reading assignments, taking notes, and organizing the reading content into main and sub-topic structure. Students may volunteer for this course or be recommended by a faculty member.

Education 491. Measurement and Evaluation in Teaching and Learning

Cr: 3 s.hrs.

This introductory course deals with teacher-made tests, standardized tests, and other devices for measuring and evaluating achievement, intelligence, aptitudes, social relationships, and personal-social adjustment. Instruction and practice are given in diagnosing disabilities in subject-matter areas and in appraising, marking, and report-

PROFESSIONAL BACKGROUND COURSES

ing pupil progress. The student constructs, uses, and evaluates teacher-made tests, selects and administers standardized tests, handles test scores, and interprets test data.

Education 492. Comparative Education

Cr: 3 s.hrs.

The educational systems of Europe, Asia, Africa, and Latin America are studied in an attempt to gain insight into the essential qualities of American education. In this process the relationship among the educational system of each culture and its history, economy, and political and social organization should emerge. Factors causing progress and change in education since 1900 are observed.

ELEMENTARY EDUCATION COURSES

Although Montclair State College is engaged primarily in preparing secondary-school teachers the following courses are offered to supplement the curriculum for those major fields offering certification in elementary and secondary schools.

Ed. 472. Elementary School Curriculum

Cr: 2 s.hrs.

This course acquaints the College student with the subject-matter of the elementary school curriculum for grades 3-6 inclusive. In addition, the following are studied: (1) correlation among subjects; (2) the appraisal and use of textbooks; (3) the use of visual aids; (4) the methods adapted to each subject; and (5) use of course of study materials.

Ed. 473. Elementary School Language Arts

Cr: 2 s.hrs.

This course gives an overview of modern practices that are used in teaching reading, creative writing, speaking, spelling, and handwriting in the elementary grades. Students are helped to recognize and to make provision for readiness for learning in these areas, to learn or devise various techniques that will meet the needs of different children and situations, and to evaluate, select, and create suitable materials to be used at various maturity levels. Special emphasis is placed on the functional use of the language arts in the total curriculum and life of the elementary-school child.

THE DEPARTMENT OF BUSINESS EDUCATION

Freeman (*Chairman*), Collins, Froehlich, Haas, Nanassy,
Neuner, Sheppard, VanDerveer

Montclair State College is now the only state college in the northern section of New Jersey that trains business-education teachers. The Business Education Department prepares teachers who are qualified to teach all of the business-education subjects usually offered in most high schools.

A business education student may choose one of three programs. He may take the comprehensive business education major which carries with it certification to teach all the business education subjects in the secondary school; or, he may specialize in the field of book-keeping and accounting; or, he may choose to specialize in the secretarial studies.

All of the work in the Business Education Department is open to students who have never studied business-education subjects in high school. Students who can type, write Gregg shorthand, or do accounting with a reasonable degree of speed and accuracy may be exempted from the first courses upon the successful completion of placement examinations given during the first week of classes.

BUSINESS EDUCATION MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	1/2	<i>Activities</i>	1/2
Soc. St. 100A <i>Dev. of World</i>		Soc. St. 100B <i>Dev. of World</i>	
<i>Civilization</i>	3	<i>Civilization</i>	3
Speech 100D <i>Fund. of Speech</i> ..	3	Eng. 100C <i>Fund. of Writing</i> ..	3
Ed. 100 <i>Mental Hygiene &</i>		Sci. 100A <i>Physical Science or</i>	
<i>Pers. Adj.</i>	2	Sci. 100B <i>Biological Science</i> ..	4
F.A. 100 <i>Intro. to Visual Arts</i> ..	3	Music 100 <i>Music Appreciation</i> ..	2
B.E. 101 <i>Intro. to Business</i>	3	B.E. 300 <i>Bus. Mathematics</i>	2
B.E. 103 <i>Typewriting, I</i>	1 1/2	B.E. 104 <i>Typewriting, II</i>	1 1/2
	16		16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	1/2	<i>Activities</i>	1/2
Soc. St. 200A <i>Contemp. Amer.</i>		Soc. St. 200B <i>Contemp. Amer.</i>	
<i>Life</i>	3	<i>Life</i>	3
Ed. 201 <i>Human Dev. & Behavior</i>	3	Ed. 202 <i>Human Dev. & Behavior</i>	3
Sci. 100C <i>Earth Science</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
B.E. 201 <i>Accounting, I</i>	3	B.E. 202 <i>Accounting, II</i>	3
B.E. 203 <i>Typewriting, III</i>	1	B.E. 404 <i>Bus. Economics</i>	3
B.E. 205 <i>Stenography, I</i>	3	B.E. 206 <i>Stenography, II</i>	3
	15 1/2		17 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School and</i>		Ed. 304 <i>Prin. & Techs. of</i>	
<i>Community</i>	3	<i>Sec. Ed.</i>	3
Lang. 300 <i>Found. of Lang.</i>	2	Math. 400 <i>Elem. Statistical</i>	
Elective	2	<i>Reasoning</i>	2
B.E. 305 <i>Business Law, I</i>	3	Elective	4
B.E. 301 <i>Accounting, III</i>	2	B.E. 402 <i>Accounting, IV</i>	2
B.E. 308 <i>Economic Geography</i> ..	3	B.E. 401D <i>Prin. & Meth. of</i>	
B.E. 401A <i>Prins. & Methods of</i>		<i>Teaching Typewriting</i>	1
<i>Teaching Gen. Bus.</i>	2	B.E. 409 <i>Consumer Education</i> ..	3
	17		15

Related Business Experience (400 clock hours)

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Elective <i>Mathematics or Science</i> ..	2	Ed. 4?? <i>Education Elective</i>	3
Elective	4	Elective <i>Humanities</i>	2
B.E. 401B <i>Prin. & Meth. of</i>		Elective	2
<i>Teaching Bookkeeping</i>	2		
B.E. 401C <i>Prin. & Meth. of</i>			
<i>Teaching Shorthand</i>	2		
Eng. 100G <i>Western World Lit.</i> ..	3		
	16		15

Total: 128 Semester Hours

THE CURRICULA

BOOKKEEPING AND ACCOUNTING MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Speech 100D <i>Fund. of Speech</i>	3	Eng. 100C <i>Fund. of Writing</i>	3
Ed. 100 <i>Mental Hygiene & Pers. Adjustment</i>	2	Sci. 100A <i>Physical Science or Sci. 100B Biological Science</i> ..	4
F.A. 100 <i>Intro. to Visual Arts</i>	3	Music 100 <i>Music Appreciation</i> ..	2
B.E. 101 <i>Intro. to Business</i>	3	B.E. 300 <i>Bus. Mathematics</i>	2
B.E. 103 <i>Typewriting, I</i>	1½	B.E. 104 <i>Typewriting, II</i>	1½
	16		16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemp. Amer. Life</i>	3	Soc. St. 200B <i>Contemp. Amer. Life</i>	3
Ed. 201 <i>Human Dev. & Behavior</i> ..	3	Ed. 202 <i>Human Dev. & Behavior</i> ..	3
Eng. 100G <i>Western World Lit.</i> ..	3	H. Ed. 100 <i>Healthful Living</i>	2
Elective	3	B.E. 202 <i>Accounting, II</i>	3
B.E. 201 <i>Accounting, I</i>	3	B.E. 404 <i>Business Economics</i> ..	3
B.E. 203 <i>Typewriting, III</i>	1	B.E. 408 <i>Business Finance</i>	3
	16½		17½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prin. & Tch. of Sec. Ed.</i> ..	3
Sci. 100C <i>Earth Science</i>	2	Elective	3
Elective	2	B.E. 306 <i>Business Law, II</i>	3
B.E. 305 <i>Business Law, I</i>	3	B.E. 402 <i>Accounting, IV</i>	2
B.E. 301 <i>Accounting, III</i>	2	Math. 400 <i>Elem. of Statistical Thought</i>	2
B.E. 308 <i>Economic Geography</i> ..	3	B.E. 401A <i>Prin. & Tech. of Teaching Gen. Business</i>	2
	15	B.E. 401D <i>Prin. & Meth. of Teaching Typewriting</i>	1
			16

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective <i>Mathematics or Science</i> ..	2	Elective— <i>Humanities</i>	2
Lang. 300 <i>Found. of Language</i> ..	2	B.E. 410X <i>Advanced Acct.</i>	2
Elective	4	Ed. 4?? <i>Edu. Elective</i>	3
B.E. 401B <i>Prin. & Meth. of Teaching Bookkeeping</i>	2		
B.E. 405 <i>Office Practice—Clerical</i>	3		
	16		15

Total: 128 Semester Hours

BUSINESS EDUCATION

SECRETARIAL STUDIES MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	1/2	<i>Activities</i>	1/2
Soc. St. 100A <i>Dev. of World</i>		Soc. St. 100B <i>Dev. of World</i>	
<i>Civilization</i>	3	<i>Civilization</i>	3
Speech 100D <i>Fund. of Speech</i> ...	3	Eng. 100C <i>Fund. of Writing</i>	3
Ed. 100 <i>Mental Hygiene & Pers.</i>		Sci. 100A <i>Phy. Sci. or Sci. 100B</i>	
<i>Adjustment</i>	2	<i>Biological Sci.</i>	4
F.A. 100 <i>Intro. to Visual Arts</i> ..	3	Mus. 100 <i>Music Appreciation</i> ...	2
B.E. 101 <i>Intro. to Business</i>	3	B.E. 300 <i>Business Mathematics</i> ..	2
B.E. 103 <i>Typewriting, I</i>	1 1/2	B.E. 104 <i>Typewriting, II</i>	1 1/2
	16		16

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	1/2	<i>Activities</i>	1/2
Soc. St. 200A <i>Contemp. Amer.</i>		Soc. St. 200B <i>Contemp. Amer.</i>	
<i>Life</i>	3	<i>Life</i>	3
Ed. 201 <i>Human Dev. & Behavior</i>	3	Ed. 202 <i>Human Dev. & Behavior</i>	3
Sci. 100C <i>Earth Science</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
B.E. 201 <i>Accounting, I</i>	3	B. Ed. 206 <i>Stenography, II</i>	3
B.E. 205 <i>Stenography, I</i>	3	B. Ed. 404 <i>Business Economics</i> ..	3
B.E. 203 <i>Typewriting, III</i>	1	Elective	3
	15 1/2		17 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prin. & Tch. of Sec. Ed.</i>	3
Lang. 300 <i>Found. of Lang.</i>	2	Math. 400 <i>Elem. of Statistical Thought</i>	2
B.E. 305 <i>Business Law, I</i>	3	B.E. 204 <i>Typewriting, IV</i>	1
B.E. 303 <i>Stenography & Transcription, I</i>	3	B.E. 207 <i>Office Practice, Secretarial</i>	3
B.E. 308 <i>Economic Geography</i> ..	3	B.E. 401A <i>Prin. & Meth. of Teaching General Business</i> ...	2
Elective	2	B. E. 401D <i>Prin. & Meth. of Teaching Typewriting</i>	1
	16	B.E. 421 <i>Finance & Investment for Families</i>	2
		Elective	2
			16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Elective <i>Mathematics or Science</i> ..	2	Ed. 4?? <i>Edu. Elective</i>	3
Elective	4	Elective, <i>Humanities</i>	2
Eng. 100C <i>Western World Lit.</i> ...	3	Elective	2
B.E. 401C <i>Prin. & Meth. of Teaching Steno.</i>	1		
B.E. 405 <i>Office Practice, Clerical</i>	3		
	16		15

Total: 128 Semester Hours

THE CURRICULA

Students who complete the major in Business Education will be eligible for a New Jersey Certificate for the teaching of all subjects in the Business Education curriculum of the Secondary Schools.

Students who complete the Secretarial Studies major will be eligible for teaching Secretarial subjects and typewriting in grades 7-12.

Students who complete the Bookkeeping and Accounting major will be eligible for a New Jersey Certificate for the teaching of bookkeeping and accounting, and typewriting in grades 7-12.

Minors in the Department of Business Education

The following courses are required in the various business education minor fields:

Secretarial Studies Minor Sequence for Majors in Departments Other Than Business Education

B.E.-103	Typewriting, I	1½*
B.E.-104	Typewriting, II	1½*
B.E.-205	Stenography, I	3*
B.E.-206	Stenography, II	3*
B.E.-303	Stenography & Transcription, I	3
B.E.-203	Typewriting, III	1
B.E.-204	Typewriting, IV	1
B.E.-401D	Principles & Methods of Teaching Typewriting ..	1
B.E.-407	Secretarial Office Practice or	
B.E.-405	Clerical Office Practice—Accounting	3
B.E.-421	Finance and Investment for Families	2
B.E.-304	Stenography & Transcription, II	1
B.E.-401	Principles & Methods of Teaching Stenography ..	1

22

*May be waived by permission from the Department Chairman.

Students who complete the Secretarial Studies minor will be eligible for a certificate for teaching Secretarial studies and typewriting in grades 7-12.

General Business Minor Sequence for Majors in Departments Other Than Business Education

B.E.-101	Introduction to Business	3
B.E.-103	Typewriting, I	1½*
B.E.-104	Typewriting, II	1½*
B.E.-300	Business Mathematics—In Lieu of	
	Mathematics 300	(2)
B.E.-404	Business Economics	3
B.E.-305	Business Law, I	3
B.E.-308	Economic Geography	3
B.E.-203	Typewriting, III	1
B.E.-408	Business Finance	3
B.E.-409	Consumer Education	3
B.E.-401A	Principles & Methods of General Business	2
B.E.-401D	Principles & Methods of Teaching Typewriting ..	1

25

*May be waived by permission from the Department Chairman.

BUSINESS EDUCATION

Students who complete the General Business minor will be eligible for a New Jersey Certificate to teach social business subjects and typewriting in grades 7-12.

Bookkeeping and Accounting Minor Sequence for Majors in Departments Other Than Business Education

B.E.-201	Accounting, I	3*
B.E.-202	Accounting, II	3*
B.E.-103	Typewriting, I	1½*
B.E.-104	Typewriting, II	1½*
B.E.-301	Accounting, III	2
B.E.-302	Accounting, IV	2
B.E.-410X	Advanced Accounting	2
B.E.-305	Business Law, I	3
B.E.-408	Business Finance	3
B.E.-203	Typewriting, III	1
B.E.-401B	Principles & Methods of Teaching Bookkeeping ..	2
B.E.-401D	Principles & Methods of Teaching Typewriting ..	1

25

Students who complete the accounting minor will be eligible for a New Jersey Certificate to teach bookkeeping and accounting and typewriting in grades 7-12.

All students majoring in the Business Education Department must complete ten weeks (400 hours) of practical business experience for certification. This co-operative work experience program must be completed before the senior year.

All business-education majors also must observe business-education classes in various high schools. The details of this program are supplied by the Chairman of the Department.

All students majoring in the Business Education Department are required and all students minoring in the Department are invited to participate in the extra-curricular programs planned by the Department. Epsilon Mu Epsilon is the departmental club with membership open to all majors and minors. Students are given opportunities for leadership and social activities. Outstanding students receive invitations to become members in the Beta Sigma Chapter of Pi Omega Pi, the National Honorary Business Education Society.

DEPARTMENTAL COURSE OFFERINGS

B. E. 100. Survey of Business

Cr: 3 s.hrs.

This course provides an opportunity for the non-business major to learn to keep and manage his personal financial records, to become acquainted with his legal responsibilities, and to learn basic typewriting skills. This course is not open to business education majors and social business minors.

*May be waived by permission from the Department Chairman.

THE CURRICULA

B. E. 101. Introduction to Business

Cr: 3 s.hrs.

This course is an introduction to the world of business. It goes into the functions of business, bank service, credit, investments, insurance, forms of business organization, personnel problems, transportation and communication.

***B. E. 103. Typewriting, I**

Cr: 1½ s.hrs.

This is a course for freshman students who have had no previous typewriting instruction, or for those who have had typewriting in high school but who have failed to meet the placement examination standards. At the end of the semester, the student has a basic facility in typing from straight copy, in setting up paragraph material in medium-length letters accurately on a business letterhead, and in typing term papers. This course meets for three periods per week.

***B. E. 104. Typewriting, II**

Cr: 1½ s.hrs.

The aim of this course is to increase the typing speed and ability of the student by stressing accuracy in all material typed. Advanced letter forms, such as the block, full block, five-indent, and all variations of the modified block, are applied at frequent intervals to insure thorough recall. This course meets for three periods per week.

***B. E. 201. Accounting, I**

Cr: 3 s.hrs.

This is a basic course in accounting. It is designed for the student who has never studied bookkeeping. Emphasis is placed on developing a thorough understanding and mastery of the fundamental elements of bookkeeping and accounting. After analyzing the elementary accounting equations, the student learns to journalize, post, take a trial balance, and prepare financial statements, as applied to the sole proprietorship form of organization. Prerequisite: Typewriting 103 or college equivalent.

***B. E. 202. Accounting, II**

Cr: 3 s.hrs.

This course starts with a thorough review of the accounting cycle. The student learns to use special journals, controlling accounts, work sheets, classified statements, reserves, accruals, deferred items, reversals, special columns, and business papers. Special attention is given to the use of voucher system, pay-roll accounting, and accounting for taxes. Prerequisite: B. E. 201.

B. E. 203. Typewriting, III

Cr: 1 s.hr.

Mastery of the keyboard and remedial treatment of any deficiencies in basic skills are emphasized in this course. Additional speed and accuracy are developed. Much time is spent on office typewriting skills including handling multiple carbons, preparing invoices, and other business forms. This course meets three periods per week.

*May be waived by permission from the Department Chairman and other electives substituted.

B. E. 204 Typewriting, IV (Methods) Cr: 1 s.hr.

The course, a continuation of B.E. 203, includes the methods of teaching typewriting. This course meets for three periods per week.

***B. E. 205. Stenography, I Cr: 4 s.hrs.**

The theory of Gregg stenography (Simplified) is taught in this beginning course. The student learns to read shorthand fluently and to take dictation on familiar material.

***B. E. 206. Stenography, II Cr: 3 s.hrs.**

Gregg shorthand theory (Simplified) is thoroughly reviewed, and unfamiliar dictation is given at moderate speeds; vocabulary building is emphasized. Prerequisite: B. E. 205 or college equivalent.

B. E. 208. Salesmanship Cr: 3 s.hrs.

The principles of salesmanship in all types of selling activities are discussed. They are amplified and strengthened by individual selling demonstrations which require intensive study of the product to be sold in the demonstration and analysis of the desirable techniques for its sale. Visual aids and talks by salesmen, sales managers, and retail training directors add interest and purposefulness to the course.

B. E. 301. Accounting, III Cr: 2 s.hrs.

In this advanced course there is emphasis on all phases of partnership and corporate accounting, including: the formation of partnerships and accounts and records; corporate surplus and dividends; and corporate stocks and bonds. Departmental and branch accounting are carefully presented through exercises and laboratory problems. Prerequisites: B. E. 201 and B. E. 202, or college equivalent.

B. E. 302. Accounting, IV Cr: 2 s.hrs.

Manufacturing and cost accounting procedures are presented with complete analysis for the advanced student of accounting. Both the accounting for manufacturing operations as well as procedures for preparation of the periodic summary for a manufacturing enterprise are considered. Job order and process accounting are studied in detail as well as the problems of budgets, and the analysis and interpretation of financial statements. Prerequisites: B. E. 201, 202, 301.

B. E. 303. Stenography and Transcription, I Cr: 3 s.hrs.

The emphasis is upon the transcription of shorthand notes into typed copy. Attention is paid to sentence structure, correct grammar, spelling, and the development of good typewriting techniques. The dictation speed for new material increases as the course progresses. Prerequisites: B. E. 205, B. E. 206, or college equivalent.

*May be waived by permission from the Department Chairman and other electives substituted.

THE CURRICULA

B. E. 304. Stenography and Transcription, II (Methods) Cr: 3 s.hrs.

Both transcription and stenographic skills are improved in this course. Shorthand theory is reviewed and tested. Office-style dictation supplants some of the conventionally timed dictation. The methods of teaching secretarial subjects are included in this course. Prerequisites: B. E. 205, B. E. 206, and B. E. 301.

B. E. 305. Business Law, I Cr: 3 s.hrs.

The purpose of this course is to acquaint the student with the laws relating to everyday business transactions. It includes such topics as: court systems, contracts, agency, employer-employee relationships, negotiable instruments, bailor and bailee, carriers, and shippers.

B. E. 306. Business Law, II Cr: 3 s.hrs.

This course is a continuation of BUSINESS EDUCATION 305. It covers sales, partnerships, property, deeds, mortgages, landlord and tenant, and torts.

B. E. 308. Economic Geography Cr: 3 s.hrs.

This course includes a study of the natural geographic areas of the world and the trade routes between these areas. Emphasis is given to the influence that natural environment has upon production, trade and the utilization of important agricultural, forestry, mineral and manufactured commodities.

B. E. 401A. Principles and Methods of Teaching General Business Cr: 2 s.hrs.

Consideration is given to the methodology of teaching the basic business subjects, including general business, business law, and consumer education. Content, lesson planning, visual aids, and evaluation procedures are considered for each subject. A test of subject-matter competency in each field is required.

B. E. 401B. Methods of Teaching Bookkeeping and Accounting Cr: 2 s.hrs.

A brief study is made of the history and development of bookkeeping instruction and materials, and aims and objectives in the light of current trends. Special attention is given to textbook selection, lesson planning, class-room and teaching procedures, tests and measurements, audio-visual and other teaching aids. Opportunities are given students to present lessons for criticism and evaluation. A test of subject-matter competency is required. Prerequisite: 12 semester-hours of accounting.

B. E. 401C. Methods of Teaching Secretarial Studies Cr: 2 s.hrs.

Techniques of teaching beginning stenography, advanced dictation and transcription, secretarial training, and clerical practice are provided in this course. Attention is given to the latest teaching materials, audio-visual aids, equipment, and supplies.

Teaching the skills of the clerical and secretarial worker is

stressed; in addition, the traits, attitudes, work habits, and understandings which, if developed, permit an office worker to make a real contribution to the business world and to society are analyzed. The unique opportunities present in the preparation of the secretarial worker for service to the school and to the community are surveyed. A test of subject-matter competency in each field is required.

B. E. 401D. Principles and Methods of Teaching Typewriting

Cr: 1 s.hr.

This course is a continuation of B. E. 203. It includes the methods of teaching typewriting.

B. E. 403. Advanced Dictation and Transcription, II

Cr: 2 s.hrs.

This course is designed for the teacher of stenography and transcription who wishes to study the problems of dictation and transcription from the viewpoint of his own class situation and also to improve his skill.

Those who take this course should have had a methods course in stenography and have had at least student-teaching experience.

B. E. 404. Business Economics

Cr: 3 s.hrs.

This course deals with the business aspects of economics as related to immediate and long-range post-war problems; operation and government control of public utilities; taxation, government finance, and labor and management problems.

B. E. 405. Office Practice—Clerical

Cr: 3 s.hrs.

Actual training is given on the 10-key and full keyboard adding listing machines, the rotary and key-driven calculating machines, and the posting machine. Other office skills necessary for the clerical worker are stressed. Limited instruction is provided on the voice-writing and duplicating equipment.

Techniques of job analysis, including job description, job breakdown, and job evaluation are practiced. Supervised work experience is a requirement of this course.

B. E. 406. Advertising, I

Cr: 2 s.hrs.

This course aims to acquaint the student with the social and economic aspects of advertising so that a fair evaluation may be made of its worth as well as its undesirable aspects. Copy appeals, the writing of copy, advertising layouts, and the selection of appropriate types of media for various advertisements are considered. Emphasis is placed on the research aspects of the subject so important today.

B. E. 407. Office Practice—Secretarial

Cr: 3 s.hrs.

This course familiarizes the prospective teacher of secretaries with the operation of voice-writing and duplicating equipment. The duties of the secretarial worker are studied, with attention being paid to filing. Understanding of office procedures and stenographic skill

THE CURRICULA

are strengthened through supervised office assignments and class work projects. Supervised work experience is a requirement.

B. E. 408. Business Finance

Cr: 3 s.hrs.

This course deals with the processes involved in the financing of business organizations from the time of their inception and promotion, during operation and expansion, and during the period of reorganization. Problems involving financing by means of stock, borrowed capital, mortgages, bonds, and notes are solved.

B. E. 409. Consumer Education

Cr: 3 s.hrs.

Consideration is given to the role of the consumer in the economy, some of the forces affecting consumer demand, governmental and private agencies aiding the consumer, and the development of intelligent techniques for buying and using consumer goods and services.

B. E. 410. Advanced Accounting

Cr: 3 s.hrs.

This is an advanced course for students who have had two years of accounting. Emphasis is on techniques of problem solving. Included are problems relating to basic accounting principles, cost accounting, and intermediate accounting. Considered are determination of net income on accrual, cash and installment bases; problems of valuation, including problems of depreciation, depletion, and amortization; consignments; preparation and analysis of financial statements, including analysis of net change in gross profit and net change in working capital; partnership formation, operation, dissolution, and liquidation; bankruptcy, reorganization, and recapitalization and consolidated balance sheets and income statements. Prerequisites: B. E. 201, B. E. 202, B. E. 301, and B. E. 302 or college equivalent.

B. E. 411. Tax Accounting

Cr: 2 s.hrs.

The purpose of this course is to give a comprehensive picture of the Federal Tax structure. Extensive training is provided in the application of basic principles to the specific problems of the individual. All forms involved in individual tax returns are studied. Prerequisite: 12 semester-hours of accounting.

B. E. 412. Project Development in Consumer Education

Cr: 2 s.hrs.

This course permits the students to explore in a specialized fashion two major areas of consumer education. Two projects are developed, one on housing and the other on the furnishings of a home which illustrate the handling of material and the procedures that might be used in developing other consumer education units. Prerequisite: A course in consumer education or economics.

B. E. 414. Merchandising, I

Cr: 2 s.hrs.

This course analyzes the problems of how, what, where and when to buy; terms of purchasing, tested receiving and marketing procedures; mathematics of merchandising—setting retail price, planning

mark-up and mark-down; and inventory controls. It is designed to assist the teacher of the prospective or actual small businessman.

B. E. 417. Marketing

Cr: 2 s.hrs.

The functions involved in the marketing process, the various channels of distribution, marketing institutions, and the costs of marketing are considered in this course. Such topics as auctions, produce exchanges, wholesalers, retailing, department and mail-order stores, chain stores, cooperatives, profits and prices are included.

B. E. 418. Retail Store Management

Cr: 2 s.hrs.

The work of the store manager in retail store operation is fully explored. The problems of organization and management as encountered in various types of retail stores are discussed. Consideration is given to trends, principles, and practices in small and large stores in both the independent and chain-store fields.

B. E. 420. Field Studies in Business Education

Cr: 2 s.hrs.

This orientation course aims to introduce business-education students, through direct observation, to the realities of the business world. Six field trips are made in the New York Metropolitan Area which include visits to business organizations where the following types of business activity or relationships may be observed: production; merchandising and advertising; finance; transportation and communication; employer-employee relationships; government and business relationships. The field trips are supplemented by regular class sessions where discussions are held and visual aids presented to make the visits more meaningful.

B. E. 421. Finance and Investments for Families

Cr: 2 s.hrs.

This course applies the principles of budgeting, banking, insurance, finance, and investments to the complicated problems facing individuals and families in these areas. It deals with budgets; savings; banking; life insurance; general insurance annuities; pensions; wills; such investments as stocks, bonds, and mutual funds; homes; and small business enterprises.

THE CURRICULA

THE DEPARTMENT OF ENGLISH

Bohn (*Chairman*), Almquist, Conrad, Earley, Feierabend, Hanson, Krauss, Leavitt, McGee, Pettegrove, Reaske, Roberts, Young

Courses are designed and arranged to achieve, directly and indirectly, the following objectives for students preparing themselves to be teachers in the secondary school:

1. To accumulate a factual and critical knowledge of literature—World, English, American—from ancient times to the present;
2. To practice various types of writing, principally expository, creative, and journalistic, and to gain reasonable command of the process of research;
3. To learn professional methods and testing which will produce the most effective response to what is being taught and learned;
4. To cultivate a knowledge of the arts and sciences to understand whatever extensions of them may appear in what is being read or written;
5. To become acquainted with aids to communication as provided by pictures, television, radio, tape-recordings, and other devices;
6. To recognize the importance of co-curricular activities and to learn how to provide such experiences for the high school student.

ENGLISH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 100A <i>Dev. of World Civ.</i>	3	Soc. St. 100B <i>Dev. of World</i>	
F.A. 100 <i>Intro. to the Visual Arts</i>	3	<i>Civilization</i>	3
Ed. 100 <i>Mental Hyg. &</i>		Mus. 100 <i>Music Appreciation</i> ...	2
<i>Pers. Adj.</i>	2	Sci. 100A <i>Physical Science or</i>	
Sci. 100C <i>The Earth Sciences</i> ...	2	Sci. 100B <i>Biological Science</i> ...	4
Eng. 100A <i>World Literature, I</i> ...	3	Eng. 100B <i>World Literature, II</i> ...	3
Eng. 103 <i>English Composition</i> ...	3	Eng. 102 <i>British & Amer. Drama</i>	3
	16½		15½

SOPHOMORE YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 200A <i>Contemp. Amer.</i>		Soc. St. 200B <i>Contemp. Amer.</i>	
<i>Life</i>	3	<i>Life</i>	3
Ed. 201 <i>Hum. Dev. & Beh., II</i> ...	3	Ed. 202 <i>Hum. Dev. & Beh., II</i> ...	3
Speech 100D <i>Fund. of Speech</i> ...	3	Electives	4
Electives	4	Eng. 203 <i>Lang. in Human Affairs</i>	2
Eng. 201 <i>Amer. Literature, I</i> ...	3	Eng. 202 <i>Amer. Literature, II</i> ...	3
	16½		15½

JUNIOR YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Ed. 303 <i>Teach. in Sch. & Com.</i> ...	3	Ed. 304 <i>Prin. & Tech. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Math.</i> ...	2	Math. 400 <i>Statistics</i>	2
H. Ed. 100 <i>Healthful Living</i> ...	2	Lang. 300 <i>Found. of Lang.</i> ...	2
Electives	3	Electives	4
Eng. 301 <i>Shakespeare's Major</i>		Eng. 302 <i>Read. Adventures for</i>	
<i>Plays</i>	3	<i>High School Readers</i>	2
Eng. 303 <i>Poetry from Chaucer</i>		Eng. 304 <i>British & American</i>	
<i>to Frost</i>	3	<i>Fiction</i>	3
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> . . .	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Math. or Science</i>	2	Ed. 4?? <i>Edu. Elective</i>	3
Electives	4	Elective— <i>Humanities</i>	2
Eng. 401 <i>Teach. of Eng. in S. S.</i> . . .	3	Elective	2
Eng. 402 <i>Survey of British</i> <i>Lit. to 1778</i>	3		
Eng. 419 <i>Theories & Teaching</i> <i>of Grammar</i>	2		
	17		15

Total semester hours 128

Note: Of 21 semester-hours of electives, 9 are required to be spent in a secondary teaching field other than the major.

REQUIREMENTS FOR THE MAJOR OBSERVING
IN COLLEGE HIGH SCHOOL

Freshmen,	5 observations—to further orientation.
Sophomores,	15 observations—to study individual pupils in conjunction with course in human growth and development.
Juniors,	25 observations—to emphasize working with total class situations.
Seniors,	45 observations—to become aware of total classroom procedures.

Required number of observations for majors for four years is 90.

COURSE REQUIREMENTS FOR THE MINOR

	<i>Semester-hours</i>
ENGLISH 100G— <i>Western World Literature</i>	3
ENGLISH 201— <i>American Literature, I</i>	3
ENGLISH 202— <i>American Literature, II</i>	3
ENGLISH 303— <i>Poetry from Chaucer to Frost</i>	3
ENGLISH 304— <i>British and American Fiction</i>	3
ENGLISH 401— <i>The Teaching of English in Secondary Schools</i>	3
ENGLISH ELECTIVES FROM 100A, 100B, 102, 302, 402	3
	21

REQUIREMENTS FOR THE MINOR OBSERVING
IN COLLEGE HIGH SCHOOL

While the senior English minors are taking English 401 during the six weeks in the spring semester after their return from practice-teaching, they are required to make 20 observations in the English classes of College High School.

DEPARTMENTAL COURSE OFFERINGS

General Education Courses: 100C, 100G.

THE CURRICULA

Course Requirements for the Major: 100A, 100B, 102, 103, 201, 202, 203, 301, 302, 303, 304, 401, 402, 419.

Electives for the Major: 310, 404, 406, 407, 408, 413, 428.

Electives designed primarily for Non-English Majors: 350, 351, 352, 353, 421, 432, 452.

(Designed as humanities electives, these courses may be elected by English majors only as free electives; not as humanities electives.)

DESCRIPTION OF COURSES

English 100A. World Literature, I

Cr: 3 s.hrs.

From ancient times through the medieval, the main themes and forms of Western World Literature are studied. A comprehensive perspective of literary transitions is the main objective.

English 100B. World Literature, II

Cr: 3 s.hrs.

The objectives of 100A are pursued through the Renaissance into modern times.

English 100C. Fundamentals of Writing

Cr: 3 s.hrs.

Competence in finding, understanding, organizing, and expressing ideas and supporting information is the prime objective. Deficiencies in writing habits receive individual attention. Eight compositions and a concluding research paper are required.

English 100G. Western World Literature

Cr: 3 s.hrs.

Representative selections of literature typifying each of the major cultural epochs of the Western World—Hebrew, Graeco-Roman, Medieval, Renaissance, and Modern—are read intensively. This reading becomes the core of extensive study, as relationships from culture to culture and age to age are identified and established.

English 102. British and American Drama

Cr: 3 s.hrs.

Representative plays illustrating the development of the drama in England and the United States from beginning to the present are read and analyzed. Continental dramatists are also read whenever the development demands. All aspects of the drama as literature and as stage production are considered.

English 103. English Composition

Cr: 3 s.hrs.

Skill in the art of thinking is stressed as basic to expressing ideas clearly in writing. Expository writing, stimulated by collateral reading and discussion, is practiced. Deficiencies in mechanics, rhetoric, and style receive individual attention. Research procedures precede the culminating activity—writing based on secondary research.

English 201. American Literature, I

Cr: 3 s.hrs.

Literary works from William Bradford through James Russell Lowell are studied in relation to their political and social backgrounds as a record of events and influences forming a new nation.

English 202. American Literature, II

Cr: 3 s.hrs.

Literary works from Walt Whitman to the present are studied to

direct attention to their aesthetic value and to their political and social background and influence.

English 203. Language in Human Affairs

Cr: 2 s.hrs.

The meaning approach to language is the basis of this course. The function of linguistic symbols in practical communication—listening, speaking, reading, writing—is stressed. Areas of study: relations between words and non-verbal symbols to which society responds, words and literary experiences, vocabulary.

English 301. Shakespeare's Major Plays

Cr: 3 s.hrs.

The plays of Shakespeare most frequently taught in high school are studied in terms of Shakespeare's dramatic art, sources of his plays, staging in the Elizabethan theater and in the modern, and typical textual problems. Providing background and methods for teaching Shakespeare in high school is the objective.

English 302. Reading Adventures for High School Readers **Cr: 2 s.hrs.**

A study of the reading interests of different age levels identifies problems involved in the selection of literature for grades 7-12. Reading and analysis of representative works to develop a knowledge of extensive reading are the main activities.

English 303. Poetry from Chaucer to Frost

Cr: 3 s.hrs.

Major British and American poets are studied historically and individually. The nature and techniques of poetry, its type and forms, are subject to inquiry. The inspiration of poetic insight is emphasized.

English 304. British and American Fiction

Cr: 3 s.hrs.

From Defoe to Faulkner, significant English and American novelists, together with their critics, are read and analyzed for theory and technique. Values reflected in their portrayal of society are examined.

English 310. Journalism

Cr: 2 s.hrs.

Problems of teaching journalism and of advising student publications are considered. Training is given in recognizing and covering news and preparing it for print, including copywriting, headline writing, proof reading, and page make-up. Little or no previous training in journalism is needed.

English 350. Contemporary Drama

Cr: 2 s.hrs.

Form and meaning in plays from Ibsen to Ionesco are examined. Critical insight is emphasized as the basis of understanding and appreciation. Current theater events are reviewed weekly.

English 351. Forms of Literature

Cr: 2 s.hrs.

Distinctive characteristics and functions of literary forms are studied. Attention is focused on present-day types. Critical principles are established to further the reading of contemporary writers.

THE CURRICULA

English 352. Language, Thought, and Behavior **Cr: 2 s.hrs.**

The effects of language on human thinking, behavior, and personality are examined. Ways in which language organizes our thinking and shades our responses are studied. Recent studies of the problems of verbal communication are reviewed.

English 353. The Novel in the World Today **Cr. 2 s.hrs.**

The broad cultural implications of the twentieth-century novel are examined. Social, political, psychological, and spiritual trends are given special attention.

English 401. Teaching English in the Secondary School **Cr: 3 s.hrs.**

Methods of handling problems in listening, speaking, reading, and writing are studied to enable a teacher to secure the best responses from junior and senior high school students. Textbooks and all tools of learning are examined and evaluated. Unit and lesson plans are analyzed and made. Critical observation of active teaching in College High School is the background of all discussion.

English 401X. Teaching English in the Secondary School **Cr: 2 s.hrs.**

The objectives are the same as Eng. 401; it is also taught in part-time, extension and summer session for certification credit.

English 402. Survey of British Literature to 1798 **Cr: 3 s.hrs.**

All forms of British literature, except drama and fiction, from the beginnings to the triumph of romanticism in 1798, are systematically surveyed. Chronology, development, and the transmission of influences and traditions through the centuries are studied.

English 404. Survey of British Literature **Cr: 2 s.hrs.**

British literature from 1798 to the present is surveyed. English 402, here continued, is a prerequisite.

English 406. The Modern Novel **Cr: 2 s.hrs.**

British and American novels of the twentieth century are reviewed. Critical attention is directed toward political, social, and literary values in selected novels. Students are taught how to read a novel with profit, and how to direct the reading of others.

English 407. Biography: Its Form and Function **Cr: 2 s.hrs.**

Selected biographical writings, including autobiography, diary, and memoirs, from medieval England to contemporary American Pulitzer Prize biographies, are examined. Study emphasizes both changing concepts of the form and also revelations of the nature, character, and varied destinies of human personality.

English 408. Creative Writing **Cr: 2 s.hrs.**

Each student is assisted in finding his own best field of writing, and is given further training in that field. The course is based entirely upon needs of the class as revealed in student-writing. Much

time is devoted to criticism and discussion of mutual problems. Methods of teaching creative writing are considered.

English 413. Modern Poetry

Cr: 2 s.hrs.

The distinctive poetry movements that have occurred during the present century are examined as expressions of changing social and artistic ideals. Critical appreciation is developed through comparison of diverse styles, themes, and poetic theories.

English 419. Theories and Teaching of Grammar

Cr: 2 s.hrs.

Both the traditional and the new approaches to the study and teaching of English grammar are studied. Relationships between grammatical rules and usage are examined to define the limits of grammar. The practical approach of structural linguistics to the problems of grammar in writing is discussed.

English 421. The Short Story

Cr: 2 s.hrs.

An analysis is made of the short story as an evolving literary form, emphasizing the productions of the Nineteenth and Twentieth Centuries. Stories are analyzed for both human and literary values.

English 428. The Film and Society

Cr: 2 s.hrs.

The film is studied and evaluated as an art form, an educational device, a social force, and an entertainment medium. The history of motion pictures, film techniques, and the scenario as a literary type are examined. Numerous films are shown, analyzed and discussed.

English 432. The Development of the Drama

Cr: 2 s.hrs.

Drama is studied in all periods from ancient Greece and Rome through the Middle Ages and the Renaissance to the beginning of modern drama with Ibsen. Major characteristics of the drama and its necessary complement, the theatre are emphasized.

English 443. Modern Drama

Cr: 2 s.hrs.

Trends, developments, and accomplishments from 1915 to the present in the United States and Europe provide the background of this course. Examination of structure, content, and production of plays creates critical insight and appreciation. Wide reading and theatre going are encouraged.

English 451. Literature and Art in Western Culture

Cr: 2 s.hrs.

Art provides an understanding among people throughout the world. By examining the relation between art and literature, and seeing that re-creation of experience is a function common to both, the student learns how literature provides understanding.

English 452. Five Great Books

Cr: 2 s.hrs.

Five books which have profoundly influenced the development of civilization are studied in depth. Choice is cooperative.

DEPARTMENT OF FINE ARTS

Calcia (*Chairman*), Harris, Kampf, Lockwood, Martens,
Osgood, Ross, Schiebel, Vernacchia, Watkins, Wygant

Students who complete the fine arts curriculum are certified to teach in the elementary schools, junior high schools, and senior high schools of New Jersey.

The first two years the students explore design in a variety of media and the art forms of painting, ceramics, theater and puppetry.

The third year students study art and civilization, textiles, the foundation of art education, and arts of commerce and industry.

The fourth year includes the making of prints and a study of the art curriculum of the elementary and secondary schools. Sculpture, philosophy and history of art, metalwork, home design and community planning, drafting and woodwork, photography, and life drawing are electives. Drawing is offered throughout the four years.

DEPARTMENTAL COURSE OFFERINGS

F.A. 100. Introduction to the Visual Arts **Cr: 3 s.hrs.**

For a description of this course, see page 56.

F.A. 101A and 101B. Design in Materials **Cr: 3 s.hrs. each**

These courses explore elements of design and organization into art forms. The relationship of materials, tools, and processes in terms of the function of each art form is learned through personal exploration in a wide variety of media. The integral nature of the arts and culture is given major emphasis. The reading content is based upon a study of contemporary art forms.

F.A. 102A and 102B. Ceramics: Pottery and Sculpture **Cr: 3 s.hrs. each**

These courses in ceramics include the making of pottery and sculpture by coil, slab, throwing, and casting as well as primitive techniques. All methods of decorating are explored, including slip, sgraffito, underglaze, and glaze. The making of glazes and experiments in glaze formulas are carried out. Stacking and firing the kiln are a part of each student's experience.

The course content includes a study of the world's great ceramic periods through reading and museum trips. For fine arts majors.

FINE ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>		S.H.	<i>Spring Semester</i>		S.H.
Phys. Ed. 100A	Phys. Ed.		Phys. Ed. 100B	Phys. Ed.	
<i>Activities</i>		½	<i>Activities</i>		½
Soc. St. 100A	Dev. of World Civilization, I	3	Soc. St. 100B	Dev. of World Civilization, II	3
Speech 100D	Fund. of Speech	3	Eng. 100C	Fund. of Writing	3
Sci. 100A	Physical Science or Science 100B Biological Science	4	Mus. 100	Music Appreciation	2
F.A. 101A	DESIGN IN MATERIALS, I	3	Ed. 100	Mental Hygiene & Pers. Adj.	2
F.A. 102A	CERAMICS: POTTERY & SCULPTURE, I	3	F.A. 101B	DESIGN IN MATERIALS, II	3
			F.A. 102B	CERAMICS: POTTERY & SCULPTURE, II	3
		16½			16½

SOPHOMORE YEAR

Phys. Ed. 200A	Phys. Ed.		Phys. Ed. 200B	Phys. Ed.	
<i>Activities</i>		½	<i>Activities</i>		½
Soc. St. 200A	Contemporary American Life, I	3	Soc. St. 200B	Contemporary American Life, II	3
Ed. 201	Human Development & Behavior, I	3	Ed. 202	Human Development & Behavior, II	3
Sci. 100C	The Earth Sciences	2	H.Ed. 100	Healthful Living	2
Elective		2	Lang. 300	Foundations of Language	2
F.A. 200A	THEATER ARTS, I	2	Elective		2
F.A. 202A	PAINTING, I	3	F.A. 200B	THEATER ARTS, II	2
			F.A. 202B	PAINTING, II	3
		15½			17½

JUNIOR YEAR

Ed. 303	The Teacher in School & Community	3	Ed. 304X	Principles & Methods of Tchg.	3
Electives		4	Ed. 403A	Student Teaching—Junior Practicum (4 weeks off campus)	3
F.A. 201A	TEXTILES, I	2	F.A. 201B	TEXTILES, II	2
F.A. 300A	ART & CIVILIZATION, I	3	Math. 300	Social Uses of Mathematics	2
F.A. 301A	ART IN COMMERCE & INDUSTRY, I	2	F.A. 300B	ART & CIVILIZATION, II	3
F.A. 302	FOUNDATIONS OF ART EDUCATION	2	F.A. 301B	ART IN COMMERCE AND INDUSTRY, II	2
		16			15

SENIOR YEAR

Ed. 401	Development of Educational Thought	3	Ed. 4??	Edu. Elective	3
Ed. 403B	Student Teaching (6 weeks off campus)	5	Elective	Mathematics or Science	2
Eng. 100G	Western World Lit.	3	Elective	Humanities	2
Math. 400	Educational Statistics	2	Electives		4
F.A. 403A	PRINT MAKING, I	2	F.A. 403B	PRINT MAKING, II	2
F.A. 405G	DRAWING, VII	1	F.A. 401	ART CURRICULUM OF ELEMENTARY & SECONDARY SCHOOLS	2
		16			15

Total semester-hours—128

THE CURRICULA

F.A. 110. Introduction to Design in Materials

Cr: 2 s.hrs.

This humanities elective, primarily for home economics majors, deals with elements of design and their organization into the art forms of ceramics, textiles, furniture and other articles of home use. The functional relationship of materials, tools, processes and forms is learned through studio experiences. The reading content is based upon the work of contemporary designers of home furnishings.

F.A. 200A and 200B. Theater Arts

Cr: 2 s.hrs. each

A major goal of these courses is the development of techniques of group planning for the solution of an art problem and the awareness of individual responsibility for group achievement. Experiences are in the production of puppet and marionette shows and the preparation of scenery and lighting for live productions. Study and experimentation in these areas and in the allied fields of dance, film, and television are made through reading, trips, and interviews. For fine arts majors.

F.A. 201A and 201B. Textiles

Cr: 2 s.hrs. each

These courses are concerned with the design of textiles through the processes of weaving and decorating. Textiles are woven on simple handmade looms, and on professional floor and table looms, with consideration given to types of loom experiences suitable for children of different ages. Textiles are decorated by tie and dye, block print, batik, stencil, painting, and needlework, applique, and rug hooking. Historic and contemporary fabrics and their design and uses in various cultures are studied through readings and visits to museums, shops, and galleries. For fine arts majors.

F.A. 202A and 202B. Painting

Cr: 3 s.hrs. each

These courses include experiences in many media and forms of painting. The student is encouraged to experiment with emphasis on personal modes of expression. The use of design is directed toward the formulation of a competent individual statement. The development of painting, beginning, with the impressionist movement and including contemporary directions, constitutes the major reading content of the course. Frequent visits to galleries and museums are required. For fine arts majors.

F.A. 300A and 300B. Art and Civilization

Cr: 3 s.hrs. each

A study is made of historic periods in which art most clearly reflects the culture. The impact on art of geographic conditions and social, economic, and religious forces is studied. Present art forms are understood by a study of their historic roots. These courses serve to integrate the student's historic art information and to develop his critical and evaluative abilities. Museum visits and extensive reading are required. For fine arts majors.

F.A. 301A and 301B. Art in Commerce and Industry **Cr: 2 s.hrs. each**

Lettering, layout, display, and educational exhibition techniques

are developed in the workshop. College activities when appropriate supply the content of the technical problems. The relationship of hand art to machine art is considered, and the role of the artist-industrial designer in a technological age is studied to discover his contribution to a culturally healthy environment. Readings include writings of Morris, Mumford, and others and current national and foreign periodicals of industrial design. For fine arts majors.

F.A. 302. Foundations of Art Education

Cr: 2 s.hrs.

The content of this course includes a study of research findings of the pattern of child development in plastic and graphic media; the organization and presentation of art experience to the children of grades one through twelve; the relationship of art to other areas of the curriculum; and the role of the arts in the extra-curricular program within the school and the community. Practical aspects of teaching art including materials and tools, and their source, cost, care, and organization are studied. For fine arts majors.

F.A. 400. Philosophy of Art

Cr: 2 s.hrs.

This course is designed to give the student a knowledge of the various theories of art and the nature of the art experience. Readings include the works of major philosophic writers, artists, and psychologists. Through discussion each student is encouraged to develop a personal philosophy of art education. For fine arts majors or by instructor's permission.

F.A. 401. Art Curriculum of Elementary and Secondary Schools

Cr: 2 s.hrs.

This course is planned to give the student an opportunity to organize his learnings into a tentative curriculum of art and to test his thinking in relation to the best curriculum guides in current use. For fine arts majors or by instructor's permission.

F.A. 402. Modern Philosophies of Art

Cr: 2 s.hrs.

The work of the major writers in art in the Nineteenth and Twentieth Centuries is examined. Exploration is made in the nature of the creative experience, the function of art in the life of the individual and of society, the nature of the creative process, the rise of new materials, and institutions and sentiments affecting current thinking in the field. Discussions are based on readings of philosophers, poets, social scientists, psychologists, and artists. A humanities elective for all students.

F.A. 403A and 403B. Print Making, I and II

Cr: 2 s.hrs. each

The many ways of making prints: etching, dry point, wood cuts and wood engraving, lithography, silk screen, photograms, and photography are learned in personal production which emphasizes the relation of material, tool, and process. Adaptation of these professional media to classroom use is one aspect of these courses. The

THE CURRICULA

work of masters in these various types of print making are studied in reproduction and in museum trips. For fine arts majors, and others by permission of the instructor.

F.A. 405G. Drawing, VII

Cr: 1 s.hr.

This course is required in the seventh semester. Throughout the first six semesters a program of drawing experiences is offered in connection with the major studio courses. At the end of the seventh semester a portfolio may be required evidencing general proficiency in the various media and forms of drawing.

F.A. 406. Art Workshop

Cr: 4 s.hrs.

This elective for fine arts majors is designed to allow the student to have a concentrated experience in art forms of his choice. Each student projects his own problem in consultation with, and under the direction of, a faculty member.

F.A. 408A and 408B. Painting Laboratory, I and II

Cr. 2 s.hrs. each

These humanities electives give non-art majors an opportunity to use the materials of the painter for personal creative experience. Through the use of oils, water colors, and other media, the student is encouraged to work on landscape, figure and free imaginative composition. Emphasis is placed on individuality of expression, variety of subject matter, and experimentation. No previous art experience is necessary.

F.A. 409. Industrial Design Laboratory

Cr: 2 s.hrs.

This course, planned for majors in fine arts and industrial arts, begins with a brief survey of the role and contribution of the industrial designer in contemporary society. Laboratory work follows. Students, individually or in teams, design a chosen product, considering form, function, materials, sales, potential, production problems and presentation techniques.

F.A. 420A and 420B. Sculpture General: I and II

Cr: 2 s.hrs. each

These courses provide fine arts majors, studio experiences in modeling, direct carving, construction and casting. A variety of materials are explored including clay, plaster, metal, plastics, stone and wood. Further assignments require readings, reports, and visits to museums and galleries.

F.A. 421A and 421B. Sculpture Laboratory, I and II

Cr: 2 s.hrs. each

These courses are humanities electives for non-art majors who wish to explore their ability to express themselves in three-dimensional forms. The student can experiment with clay, plaster, metal, plastics, stone and wood. Techniques include modeling, direct carving, construction, and casting. To extend the experience of sculpture beyond the studio, films are shown and museum visits are encouraged.

F.A. 425A and 425B. Metalwork General: I and II Cr: 2 s.hrs. each

These courses introduce fine arts students to the metals and techniques traditionally used in the shaping of useful articles and to the influence of both materials and construction on methods of design. The role of the designer-craftsman in a technological society, the relationships of hand and machine arts, and the influence of the handicrafts on the development of taste are explored. Research includes trips, reading and discussion.

F.A. 426A and 426B. Art Metalwork Laboratory, I and II**Cr: 2 s.hrs. each**

These courses introduce the student to the art forms of jewelry, hollow ware and enameling, and treat the influences of both materials and methods of construction and design. Humanities electives for non-art majors who wish to develop competency in metal work.

F.A. 436A and 436B. Design Laboratory, I and II Cr: 2 s.hrs. each

Humanities electives for non-art majors who wish to continue experiences introduced in Fine Arts 100. After an initial exploration of the art forms of painting, sculpture, print making, ceramics, jewelry, and textiles, each student chooses problems which he wishes to explore in greater depth. The relationship of tools, materials, and processes in terms of the function of each art form is learned through work in the media of his choice.

F.A. 440. Home Design and Community Planning Cr: 2 s.hrs.

The design of the home and the community for the full utilization of the knowledge and the resources of industry, engineering, science, and art is the content of this course. Work of leading architects and city planners is explored as it fits into the solution of the problems of interest to the student and as a reflection of our contemporary cultural patterns. Trips to sources for home furnishing, model homes, well-planned communities are included in the course activities. For fine arts majors or by permission of the instructor.

F.A. 441A and 441B. Home Design Laboratory, I and II**Cr: 2 s.hrs. each**

The design of a home, considering real needs and limitations such as orientation to sun, air currents, vistas, relation to community, plot plan, projected family size, interests, and budget is studied. The use of modern methods and materials in both house and furnishings is studied in the work of contemporary architects and designers. This is a humanities elective for non-art majors.

F.A. 445. Life Drawing Cr: 2 s.hrs.

Fine arts majors study the structure and proportions of the human form with emphasis on expressiveness of drawing.

F.A. 450. Print Making I—Silk Screen Printing Cr: 2 s.hrs.

This course affords an opportunity to study and practice the

THE CURRICULA

graphic art techniques of silk screen from the creation of the master designs through the construction of necessary printing facilities and printing. Experiences include the use of tusche, glue, stencil lacquer, and photographic techniques. For fine arts majors and others by permission of the instructor.

F.A. 460A and 460B. Photography: A Contemporary Art

Form, I and II

Cr: 2 s.hrs. each

The content is predominantly creative, using the technical materials as a medium of expression and experimentation. The work of leading contemporary artists using photography as an art medium is studied. For fine arts majors.

F.A. 461A and 461B. Photography Laboratory, I and II

Cr: 2 s.hrs. each

These courses provide for the creative development of the individual in photography, through personal experiences, trips, films, discussion, lectures, criticisms, and demonstrations. Areas for exploration include documentary, realism, romanticism, action photography, portraiture, and nature photography. Essentials of the photographic processes, including developing, enlarging and exhibiting are covered. A humanities elective for non-art majors.

F.A. 475A and 475B. Theater Arts Laboratory, I and II

Cr: 2 s.hrs. each

The purpose is to develop an increased interest and appreciation of the theater arts. Study in the allied areas of opera, musical comedy, and the dance, as well as the communication arts of cinema and television, is made through trips, reading and interviews. Special emphasis is given to the growing importance of the community theater. Construction of models is used to increase appreciation of contemporary stage and set designs. Outstanding designers are studied. Lighting demonstrations are arranged with cooperation of the Speech Department. Participation in campus theater experiences is encouraged. A humanities elective for non-art majors.

F.A. 480A and 480B. Textiles Laboratory, I and II

Cr: 2 s.hrs. each

Humanities electives for non-art majors who have an interest in developing their self-expression through creative experiences in the textile arts. Experiences may be selected from work in simple hand-made looms and table and floor looms, and the processes of dyeing, printing, needlework, applique, or rug hooking.

F.A. 490. Art of the Nineteenth Century

Cr: 2 s.hrs.

This course explores the major art movements of the Nineteenth Century in terms of the changes of social, political and artistic institutions and ideas and interests of the leading artist personalities. The rise of Classicism, Romanticism, and Realism; the salon at mid-century; the Impressionists and Post-Impressionists are discussed as

well. The work of this period is studied through illustrated lectures, museum trips, reading, and discussion. The course is planned for both fine arts majors, and for non-art majors as a humanities elective.

F.A. 491. Art of the Twentieth Century

Cr: 2 s.hrs.

This course surveys the major influences and trends in the development of painting, sculpture and architecture of the Twentieth Century. Activities include illustrated lectures, discussions, readings, reports, and visits to museums and galleries. The course is planned for both art majors, and non-art majors as a humanities elective.

F.A. 492A and 492B. Selected Problems in Art

History, I and II

Cr: 2 s.hrs. each

Seminar courses dealing with selected art problems of historic, social, and philosophical nature. Some of the following topics are chosen for a detailed examination: the human figure in the history of art, the rise of landscape painting, Impressionism in the East and West, historical views of art criticism, the self portrait, Romanticism and Realism, art and society, the art market, the relation of the sciences, and the rise of "Isms." Methods for dealing with selected topics include lectures, readings, reports and discussion. For fine arts majors.

F.A. 493. Masterpieces of World Art

Cr: 3 s.hrs.

Designed for non-art majors, this introductory course studies key works of art representing prehistoric cultures, the ancient world, the East. The Renaissance and the modern period, in reference to their historical and cultural settings and the personality of the artist. The course employs illustrated lectures, museum and gallery trips, readings and discussion. It is a humanities elective.

THE DEPARTMENT OF FOREIGN LANGUAGES

Covey (*Chairman*), Amaral, Bock, Cressey, Kibbe, Knecht,
Lenel, Parisi, Prieto, Rivera, Standing, Szklarczyk

The Department of Foreign Languages prepares teachers for the junior and senior high schools in sound scholarship, culture and an understanding of peoples whose language they are to teach.

All the courses in the Department of Foreign Languages are planned to provide linguistic skill, literary appreciation, and understanding of human relationships in order to insure efficient professional service. The emphasis is on sequential development which has the effect of unifying the work within the department and of correlating it with English, social studies, education, art and music.

Students majoring in a foreign language are required to take work in that language for the four years of the college curriculum. In these four years the prospective teacher of French, Latin, or Spanish acquires a knowledge of his major subject and an understanding of the problems connected with teaching his major.

Majors in a foreign language are required to take the following courses: 101, 102, 201, 202, 301, 302, 401, 402, and 404.

Minors in any foreign language are required to take the following courses: 101, 102, 201, 202, 401, and 402. In the modern languages minors may offer 200A and 200B in lieu of 101 and 102 when so advised. Students who begin a modern language in college may, with special permission, be admitted to 101 and 102 in their second year of the language.

Prerequisite for those majoring or minoring in any language are three or four years of high school work in the language. Consideration will be given to excellent students who have not fully met this requirement. High School Latin is desirable, but it is not prerequisite for the study of a modern language.

All class work in French, German, and Spanish is conducted entirely in these languages.

The Department sponsors foreign language clubs. In these extracurricular activities prospective language teachers have opportunity for leadership and creative work. The department also sponsors chapters of National Honor Societies in the major languages.

The College High School plays an important part in the daily life of students of the department. Observations and active participation through limited assistantship and occasional demonstration are made during the junior and senior years.

An attractive feature of the foreign language work preparatory to high school teaching is the possibility of a year of study in a foreign country, a feature which this College stresses in its training of teachers of modern languages.

Students desiring academic credit for Study Abroad register for the work before taking it. All such matters relating to the country

and institution in which the work is to be done, the amount of credit to be received, reports to be made, and the like, are prearranged with the chairman of the department. For further information see the Graduate Catalog.

Since the program started, over two hundred students from the College have spent a year of study in colleges and universities of Austria, Canada, France, Germany, Mexico, Spain, South America, and Switzerland.

DEPARTMENTAL COURSE OFFERINGS

THE BEGINNING LANGUAGES

Fr. 100A and 100B. Beginning French **Cr: 3 s.hrs. each**

These courses are designed for students who desire to start French in college. Special emphasis is placed on training the student to understand, speak, read, and write the language. Materials used introduce the student to French life and civilization. Laboratory work is part of the requirements for the courses.

Fr. 200A and 200B. Intermediate French **Cr: 3 s.hrs. each**

These courses which form a continuation of Fr. 100A and 100B are also open to students who wish to minor in French but who lack the language proficiency necessary for Fr. 101 and 102, courses designed for majors and selected minors. They introduce the students to French literature from the medieval period to the present day. Laboratory work is part of the requirements for the courses.

Ger. 100A and 100B. Beginning German **Cr: 3 s.hrs. each**

These courses are designed for students without previous instruction in German. The approach is oral-aural, and students are taught to understand and to use simple idiomatic German. Laboratory work is part of the requirements for the courses.

Ger. 200A and 200B. Intermediate German **Cr: 3 s.hrs. each**

These courses which form a continuation of Ger. 100A and 100B are open to those students who wish to minor in German but who lack the language proficiency necessary for Ger. 101 and 102. The reading material becomes increasingly more difficult with assignments being made in accordance with student needs and interest. Laboratory work is part of the requirements for the courses.

Span. 100A and 100B. Beginning Spanish **Cr: 3 s.hrs. each**

These courses are designed for students who desire to start Spanish in college. Emphasis is placed on the training of the student to understand, speak, read, and write the language. Laboratory work is part of the requirements for the courses.

Span. 200A and 200B. Intermediate Spanish **Cr: 3 s.hrs. each**

These courses which form a continuation of Span. 100A and 100B

THE CURRICULA

are also open to students who wish to minor in Spanish but who lack the language proficiency necessary for Span. 101 and 102, courses designed for majors and selected minors. Reading and discussion of representative authors in various periods and literary schools of the Spanish-speaking countries are provided. Laboratory work is part of the requirements for the courses.

FRENCH

The following courses are arranged to give the prospective teacher of French an understanding of the French people, their culture and their problems through a study of the development of their civilization—their social, economic, political, literary, and artistic life. The student is given opportunity to develop self-expression in the foreign tongue through readings, discussions, and reports.

FRENCH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A <i>Physical Science or</i>		F.A. 100 <i>Intro. to the Visual Arts</i>	3
Sci. 100B <i>Biological Science</i>	4	Sci. 100C <i>The Earth Sciences</i> ...	2
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Fr. 102 <i>FRENCH CIVILIZATION: ORIGINS TO 1610</i>	4
Fr. 101 <i>FRENCH CIVILIZATION: CONTEMPORARY FRANCE</i>	4		
	16½		15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i> ...	2	H. Ed. 100 <i>Healthful Living</i> ...	2
Electives	4	Electives	4
Fr. 201 <i>SEVENTEENTH CENTURY FRENCH PROSE & POETRY</i>	4	Fr. 202 <i>CORNEILLE, MOLIÈRE, RACINE</i>	4
	16½		16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100G <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
Fr. 301 <i>FRENCH CIVILIZATION: EIGHTEENTH CENTURY</i>	4	Fr. 302 <i>DEVELOPMENT OF THE FRENCH NOVEL TO 1890</i>	4
	16		16

SENIOR YEAR

Ed. 401 <i>Development of Educational Thought</i>	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science	2	Ed. 4?? <i>Edu. Elective</i>	3
Electives	4	Elective—Humanities	2
Fr. 401 TEACHING OF FRENCH IN SECONDARY SCHOOLS	3	Fr. 404 SURVEY OF FRENCH POETRY	2
Fr. 402 FRENCH GRAMMAR FOR TEACHERS	4		
	16		15

Total semester-hours—128

Note: 9 semester-hours of electives are required in a secondary teaching field other than the major.

Fr. 101. French Civilization: Contemporary France Cr: 4 s.hrs.

This course aims to give an understanding of France today through a study of various aspects of her material, intellectual, artistic, and spiritual life. The course is open to French majors and selected minors. Laboratory work is part of the requirements.

Fr. 102. French Civilization: Origins to 1610 Cr: 4 s.hrs.

This course acquaints the student with the background from which contemporary France has emerged. A study is made of French history from its origin and of the cultural development of France—social, intellectual, artistic, and spiritual—through the Middle Ages and the Renaissance. The course is open to French majors and selected minors. Laboratory work is part of the requirements.

Fr. 201. Seventeenth Century French Prose and Poetry Cr: 4 s.hrs.

In the sophomore year the student is introduced to the literature and life of the Seventeenth Century, an age of important French contributions to the world's literature. Special attention is given to great prose writers. The colorful reigns of Louis XIII and Louis XIV furnish the historical background of this century.

Fr. 202. Corneille, Moliere, Racine Cr: 4 s.hrs.

In this course one of the works of each of these authors is studied and analyzed to appreciate its contribution to the development of the classical theater. Students report orally and in writing on other main plays and make a careful study of the characters.

Fr. 301. French Civilization: Eighteenth Century Cr: 4 s.hrs.

This course aims to explore the literature and civilization of Eighteenth Century France. It will do so through an advanced language study based on *explication de textes* of representative authors, both prose writers and dramatists.

Fr. 302. Development of the French Novel to 1890 Cr: 4 s.hrs.

This course traces the development of the French novel from 1678 to 1890. Works characteristic of each period of development

THE CURRICULA

are read and analyzed for their background revealing life in France, their delineation of character, and their literary value and influence.

Fr. 304. French Literature for the High School **Cr: 2 s.hrs.**

This course is open to sophomore and junior French students. It acquaints the students with French authors suitable for study in the American high school. It helps the prospective teacher to select wisely those outstanding readings given to students in third and fourth year French, as well as the most representative works to be read in class from the eighth to the twelfth grades. The course is conducted entirely in French.

Fr. 306. French Drama for High School Teachers **Cr: 2 s.hrs.**

Designed to acquaint students with a wide selection of French plays suitable for study in high-school classes in French, attention is given to the special problems involved in producing a play in French with a high-school cast. As a term project, the class produces one play to be selected from the course reading list. The course is conducted entirely in French.

Fr. 310. French Phonetics **Cr: 2 s.hrs.**

This course acquaints students with the practical applications of phonetic science to the acquiring and teaching of a good pronunciation. The use of the I.P.A. is practiced in weekly transcriptions. Problems of articulation, rhythm, accentuation, and intonation are studied. Intensive work is done in the language laboratory.

Fr. 401. The Teaching of French in Secondary Schools **Cr: 3 s.hrs.**

The student plans lessons, evaluates techniques, and demonstrates his understanding of good foreign language teaching procedures, based on class lectures, discussions, and readings; he learns to handle the language laboratory and to incorporate the newest audio-lingual techniques into the framework of direct-method teaching.

Fr. 402. French Grammar for Teachers **Cr: 4 s.hrs.**

The aim of this course is essentially professional. It provides a complete grammatical review with a wealth of collateral information of specific difficult points with demonstrations of teaching procedures. This course is closely integrated with Fr. 401.

Fr. 404. Survey of French Poetry **Cr: 2 s.hrs.**

This course presents a picture of the development of French poetry as an expression of different literary movements. Authors representative of each period are studied, with emphasis placed on the Nineteenth and Twentieth centuries.

Fr. 405. Great Currents of Contemporary French Literature **Cr: 3 s.hrs.**

The survey of contemporary French literature is based on the study and interpretation of French civilization and literature in the pre-war, war, and post-war generations. The aims of the course are:

(1) to help the student understand and appreciate the new trends of thought in France through literary interpretation; (2) to enable him to plan his reading intelligently by selecting from the abundant materials that contemporary literature offers; and (3) to give him a background for a more thorough study of this period.

Fr. 406. The Contemporary French Novel

Cr: 2 s.hrs.

This course includes readings and discussions of contemporary French novels since Proust. The student studies the developments and latest trends in the modern French novel.

Fr. 421. French Language Seminar

Cr: 2 s.hrs.

This course consists of a French-language laboratory in conversation, phonetics, and structure. Class work includes discussions, demonstrations, evaluation of available audio-visual materials, and creation of materials for the individual situation.

THE GERMAN MINOR

Ger. 101 German Civilization: Contemporary Germany

Cr: 4 s.hrs.

Ger. 102. German Civilization: Selected Chapters of Its History

Cr: 4 s.hrs.

These courses introduce contemporary German civilization and German history and geography. Students are trained systematically in understanding and using idiomatic German. Laboratory work is part of the requirements. Prerequisite: At least two years of high school German, and permission of the instructor.

Ger. 201. German Literature: Prose and Poetry of the Nineteenth and Twentieth Centuries

Ger. 202. German Literature: Prose and Poetry of the Late

Eighteenth and Early Nineteenth Centuries

Cr: 4 s.hrs. each

The basic aim of these courses is to continue to give students facility in the spoken and written use of the language. The medium used to attain this end consists of selected works (fiction, essays, poetry, and drama) of German literature from the end of the Eighteenth Century to the present time. These courses serve to introduce students to the history and the problems of German literature.

Ger. 402. German Grammar and Methods for Teachers

Cr: 4 s.hrs.

This course offers a review of grammar with special emphasis on difficulties encountered in teaching German to students of English language background. It surveys aims, objectives and methods used in teaching German in secondary schools, discusses textbooks, supplementary teaching material, the language laboratory and tests.

LATIN

The courses in Latin are designed to continue the work begun in the language in high school. Further development of the ability to read and to comprehend the language and literature, and a deepening of the understanding and appreciation of historical-cultural prominence of Rome and her contribution to Western civilization are basic objectives. Emphasis is placed upon the language of ideas as they are expressed in the literary masters, upon the social, political, and economic institutions which have influenced the Western world, and upon the evolution of the language as it developed from the Greek to the Romance.

LATIN MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A <i>Physical Science or Sci. 100B Biological Science</i> ..	4	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	Sci. 100C <i>The Earth Sciences</i> ..	2
Lat. 101 <i>CICERO & ROMAN PHILOSOPHY</i>	4	Lat. 102 <i>POETS OF THE GOLDEN AGE</i>	4
	<hr/> 16½		<hr/> 15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
Mus. 100 <i>Music Appreciation</i> ..	2	H. Ed. 100 <i>Healthful Living</i> ..	2
Electives	4	Electives	4
Lat. 201 <i>ROMAN LETTER WRITING AND BIOGRAPHY</i>	4	Lat. 202 <i>ROMAN HISTORY</i>	4
	<hr/> 16½		<hr/> 16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Mathematics</i>	2	Eng. 100B <i>Western World Literature</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
Lat. 301 <i>ROMAN DRAMA</i>	4	Lat. 302 <i>ROMAN SATIRE</i>	4
	<hr/> 16		<hr/> 16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science	2	Ed. 4?? <i>Edu. Elective</i>	3
Electives	4	Elective—Humanities	2
Lat. 401 TEACHING OF LATIN IN SECONDARY SCHOOLS	3	Lat. 404 MEDIEVAL LATIN	2
Lat. 402 LATIN GRAMMAR FOR TEACHERS	4		
	<hr/> 16		<hr/> 15

Total semester-hours—128

Note: 9 semester-hours of electives are required in a secondary teaching field other than the major.

Lat. 101. Cicero and Roman Philosophy **Cr: 4 s.hrs.**

Cicero's philosophical essays are studied for style, content and as an introduction to philosophy.

Lat. 102. Vergil's Poetry **Cr: 4 s.hrs.**

A study of the Georgics, Eclogues, and the Aeneid to afford a view of a poet in the service of the state, and a view of the state as seen through the eyes of a poet.

Lat. 201. Roman Letter Writing **Cr: 4 s.hrs.**

The public figure of the Late Republic and the private citizen of the Silver Age are seen through the letters of Cicero and Pliny.

Lat. 202. Roman History **Cr: 4 s.hrs.**

The history of Rome is studied through the writings of Livy and Tacitus.

Lat. 301. Roman Drama **Cr: 4 s.hrs.**

The Roman dramatists are presented not only because of the merit of the plays but also because of their value in the development of the drama as a literary type.

Lat. 302. Roman Satire **Cr: 4 s.hrs.**

The satire is a mirror reflecting the life of the period, indicating forces which eventually spell the decline of Rome.

Lat. 303. Lucretius **Cr: 2 s.hrs.**

This course includes the reading of *De Rerum Natura* with study and discussion of the relation of science and philosophy in antiquity with emphasis upon Greek schools of thought and Roman interpretations of Hellenistic ideas. Attention is given to the antecedents of modern science with attention upon physical scientists including Democritus, the Greek atomic scientist who influenced Lucretius. This develops a better understanding of the modern scientific age.

Lat. 304. Latin Literature for the High School **Cr: 2 s.hrs.**

This course includes a rapid rereading of the authors tradition-

THE CURRICULA

ally read in high school classes—Caesar, Cicero, and Vergil. A compilation of an anthology of selections from Latin literature suitable for use to implement high school texts and which might serve as supplementary reading in an accelerated program is a class project.

Lat. 401. Methods of Teaching Latin in Secondary Schools Cr: 3 s.hrs.

This course includes a consideration of the aims and objectives of Latin teaching with emphasis upon the role of Latin in the high school curriculum and the integration of Latin with other high school subjects. A study of methods of teaching Latin is made in historical perspective. Teaching materials in the field are surveyed and collected. Other units developed in the course include audio-visual material, realia, preparation of and participation in classroom assignments and lessons in the demonstration high school, test construction and grading, and planning projects and club programs.

Lat. 402. Latin Grammar for Teachers Cr: 4 s.hrs.

This course develops a comprehensive view of Latin grammar, to give practice in the writing of Latin according to the styles of Caesar and Cicero, to study those styles in the best-known works, and to set standards of criticism of prose and poetical writing. These objectives stress materials useful in high-school teaching.

Lat. 404. Medieval Latin Cr: 2 s.hrs.

The emphasis in this course is on the transition of the language from Classical to Romance. It centers on literature of church and state for the study of the evolution of modern western ideas.

Lat. 405. The Elegy Cr: 2 s.hrs.

This course includes the Roman elegaic poets, Tibullus and Propertius, together with a study of the elegy as a form of poetic expression. Comparisons are made of the elegy in Latin and English.

Lat. 406. Field Studies in Roman Civilization Cr: 6 s.hrs.

The course is designed to acquaint students and teachers of Latin, history and languages with the Roman Conquest of Europe, specifically in Britain, France, Belgium, Switzerland, and Germany by studying and visiting Roman ruins and monuments in these countries, thus providing historical and archaeological background for the enrichment of their classes. Military invasions followed by colonization and the planting of Roman culture and civilization are an object of investigation, and remains "in situ" and in museums are viewed. Art and archaeology are reinforced by readings related to paralleling the site from the Latin authors: Caesar and Tacitus. Readings and a term paper due three months after the end of the tour are under the supervision of the instructor. Lectures on the tours of the sites are given by historians, archaeologists, and military personnel, authorities on the area, secured from universities, archaeological societies, museums and cultural commissions.

SPANISH

Following the trend of the times, the work in Spanish while maintaining the classic approach is now placing considerable emphasis on Hispanic-American civilization.

SPANISH MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	$\frac{1}{2}$	<i>Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Dev. of World Civ.</i>	3	Soc. St. 100B <i>Development of</i>	
Eng. 100C <i>Fund. of Writing</i>	3	<i>World Civilization</i>	3
Sci. 100A <i>Physical Science or</i>		Speech 100D <i>Fundamentals of</i>	
Sci. 100B <i>Biological Science</i> ..	4	<i>Speech</i>	3
Ed. 100 <i>Mental Hygiene &</i>		F.A. 100 <i>Intro. to the Visual Arts</i>	3
<i>Personal Adjustment</i>	2	Sci. 100C <i>The Earth Sciences</i> ...	2
Span. 101 <i>CIVILIZATION OF</i>		Span. 102 <i>CIVILIZATION OF</i>	
SPAIN, I	4	SPAIN, II	4
	<hr/> 16½		<hr/> 15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	$\frac{1}{2}$	<i>Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Contemp. Am. Life</i>	3	Soc. St. 200B <i>Contemporary</i>	
Ed. 201 <i>Human Dev. &</i>		<i>American Life</i>	3
<i>Behavior, I</i>	3	Ed. 202 <i>Human Dev. &</i>	
Mus. 100 <i>Music Appreciation</i> ...	2	<i>Behavior, II</i>	3
Electives	4	H. Ed. 100 <i>Healthful Living</i> ...	2
Span. 201 <i>HISTORY & LITERATURE</i>		Electives	4
<i>OF THE PERIOD OF CONQUEST</i>		Span. 202 <i>LITERATURE AND HIS-</i>	
<i>AND COLONIZATION OF HIS-</i>		<i>TORY OF CONTEMPORARY HIS-</i>	
<i>PANIC AMERICA</i>	4	<i>PANIC-AMERICA</i>	4
	<hr/> 16½		<hr/> 16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School &</i>		Ed. 304 <i>Prins. & Techs. of</i>	
<i>Community</i>	3	<i>Sec. Ed.</i>	3
Math. 300 <i>Social Uses of Math.</i> ..	2	Eng. 100G <i>Western World Lit.</i> ..	3
Lang. 300 <i>Found. of Language</i> ..	2	Math. 400 <i>Statistics</i>	2
Electives	5	Electives	4
Span. 301 <i>THE PROSE OF THE</i>		Span. 302 <i>THE DRAMA OF THE</i>	
<i>GOLDEN AGE</i>	4	<i>GOLDEN AGE</i>	4
	<hr/> 16		<hr/> 16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Elective—Mathematics or Science	2	Ed. 4?? <i>Edu. Elective</i>	3
Electives	4	Elective—Humanities	2
Span. 401 <i>TEACHING OF SPANISH</i>		Span. 404 <i>SURVEY OF SPANISH</i>	
<i>IN SECONDARY SCHOOLS</i>	3	<i>POETRY</i>	2
Span. 402 <i>SPANISH GRAMMAR</i>			
<i>FOR TEACHERS</i>	4		
	<hr/> 16		<hr/> 15

Total semester-hours—128

Note: 9 semester-hours of electives are required in a secondary teaching field other than the major.

THE CURRICULA

Span. 101 and 102. Survey of the History and Literature of Spain

Cr: 4 s.hrs. each

These courses center on the appreciation and understanding of Spain. The works of representative authors are read and discussed. The course is open to Spanish majors, and selected minors. Laboratory work is part of the requirements of the course.

Span. 201 and 202. Survey of the History and Literature of Hispanic-America

Cr: 4 s.hrs. each

For appreciation and understanding of Hispanic-America, the works of representative authors are read and discussed in class.

Span. 301. The Prose of the Golden Age

Cr: 4 s.hrs.

This course is designed to give understanding and appreciation of the literary works of major prose figures of the Golden Age.

Span. 302. The Drama of the Golden Age

Cr: 4 s.hrs.

The most representative plays of Lope de Vega, Tirso de Molina, Calderon de la Barca, and Ruiz de Alarcon are read and analyzed for their sources, style and versification. Character descriptions are examined against a study of the historical background of the Sixteenth and Seventeenth centuries.

ELECTIVES

Span 304. Medieval Spanish Literature

Cr: 2 s.hrs.

This course presents a review of outstanding works and themes which express the main features of Spanish literature, culture, and thought from the Eleventh Century to the advent of the Golden Age.

Span. 306. Poetry and Prose of the Golden Age

Cr: 2 s.hrs.

This course presents a study of representative poets of the Golden Century beginning with the Renaissance period, from the lirica popular and the Romancero through the adoption of the Italian forms and the mystic poets to the baroque period. Representative works in prose include the study of *La Celestina*, the picaresque novel, the *erasmistas*, and the *conceptismo* in Quevedo.

Span. 307. Spain in the Nineteenth Century

Cr: 2 s.hrs.

Emphasis is directed toward providing an understanding of the cultural and historical developments of Nineteenth Century Spain.

Span. 308. Latin America in the Nineteenth Century

Cr: 2 s.hrs.

This course covers reading and discussion of representative works of Hispanic-American literature in the Nineteenth Century.

Span. 310. Introduction to Spanish Phonetics

Cr: 2 s.hrs.

This course is designed to give an advanced study and analysis of Spanish phonetics. Skill is acquired by studying the manner and

place of articulation and by imitation of vernacular models. The language laboratory is used intensively in this course.

Span. 401. The Teaching of Spanish in Secondary Schools Cr: 3 s.hrs.

The work of this course is focused on: values of foreign language teaching; ultimate and immediate aims in foreign language teaching; survey of the outstanding methods, pronunciation, oral work, reading, grammar, reviews, realia, examinations, tests, supervised study, etc. The course consists of readings, discussions, lesson planning and demonstrations, and organization of materials for student teaching.

Span. 402. Spanish Grammar for Teachers Cr: 4 s.hrs.

This course is essentially professional. It provides a complete grammatical review with a wealth of collateral information on specific, difficult points with demonstrations of teaching procedures.

Span. 404. Survey of Spanish Poetry Cr: 2 s.hrs.

This course is designed to give an understanding and appreciation of movements in Spanish poetry from the Middle Ages to the present with emphasis on the poets of the Twentieth Century.

Span. 405. Great Currents of Contemporary Spanish Prose Cr: 3 s.hrs.

This course traces the literary trends in the prose of recent years. Particular attention is devoted to the "1898 generation."

Span. 415. Projects in Spanish and Latin-American Folklore Cr: 2 s.hrs.

This course, designed particularly for teachers and students of Spanish, surveys briefly the aims of extra-curricular activities in the field of Spanish teaching and emphasizes especially: (1) the organization of extra-curricular activities, (2) practical instruction in the preparation of materials, songs, dances, costumes, and (3) artistic presentation of the results of the course in a carefully supervised program given on the college campus.

Span. 425. Contemporary Spanish-American Poetry Cr: 2 s.hrs.

This course concentrates on trends and schools in Hispanic-American poetry from the innovations of the *modernistas* to representative works by poets of the present.

Span. 430A. The Spanish Short Story, I Cr: 2 s.hrs.

This course covers the origin and development of the short story in Spain from the Middle Ages to the present. Different types of short stories are studied to explain historically and sociologically the appearance of themes written in Spanish through the centuries.

Span. 430B. The Spanish Short Story, II Cr: 2 s.hrs.

This course covers the study of the Spanish short story as it developed in Hispanic-America.

LANGUAGE

Lang. 300. Foundations of Language

Cr: 2 s.hrs.

For a description of this course, see page 56.

Lang. 301. Classical Mythology

Cr: 2 s.hrs.

This course is designed to give an understanding of the Classical Myths which are repeated again and again in the literature of the Western World. The origins of the myths are studied through readings and art, and an interpretation of their meaning is discussed.

Lang. 401. The Teaching of Foreign Languages in Secondary Schools

Cr: 3 s.hrs.

Focused on: values of foreign language teaching; ultimate and immediate aims in foreign language teaching; survey of the outstanding methods, pronunciation, oral work, reading, grammar, reviews, realia, examinations, tests, and supervised study; the course consists of readings and discussions, lesson planning and demonstrations, and organization of materials for use in student-teaching.

Lang. 408. Introduction to Language Laboratory

Cr: 2 s.hrs.

This course is designed to acquaint language teachers with techniques of language-laboratory utilization and with the preparation of materials for use in the laboratory. Attention is given to equipment—its selection, operation, utilization, and basic maintenance. The course is open to all teachers of foreign languages and to audio-visual specialists, and is taught in English.

Lang. 410A. Roman Civilization to Imperial Times

Cr: 2 s.hrs.

Rome's contribution to Western Civilization is studied through her architecture, art, literature, science and sculpture.

Lang. 410B. Roman Civilization During the Empire

Cr: 2 s.hrs.

This course is designed to acquaint students and teachers with the Roman Conquest of Europe, with emphasis placed upon the planting of Roman culture and civilization. The course will provide a background of history and archaeology for all Latin programs. It is particularly recommended to those who will take Lat. 406.

Lang. 412. Foundations of Language, Advanced Course

Cr: 2 s.hrs.

This course continues the study of linguistics in general and of the Indo-European group in particular. It focuses upon the origin, history, and development of English phonology, morphology, and vocabulary. Through lectures and readings the student is acquainted with the latest research findings in linguistics. An individual report on some phase of this field is presented by every student.

THE DEPARTMENT OF GEOGRAPHY

Boucher, Jacobson, Kelland

Geography is a science. It deals with places and their chief attributes, the topography, the rocks and minerals, the climate, the natural vegetation and animal life, the soils, and increasingly with the role of man, his culture, his works his relationship to the earth.

The Department of Geography attempts not only to prepare teachers of geography for the junior and senior high schools, but also to: (1) contribute to their preparation as teachers of science and other subjects; (2) provide fundamental courses for the student of history, economics, and related subjects; (3) furnish a basis for enjoyment of recreation and travel; and (4) afford, as a part of general education, a broad background for the understanding of our times.

General Education Course

Sci. 100C, *The Earth Sciences*, is required of all students.

The Geography Minor

The following course requirements constitute the geography minor:

SOPHOMORE YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Geog. 201 <i>Climatology</i>	3	Geo. 204 <i>Soils, Natural Vegetation, and Land Utilization</i>	3

JUNIOR YEAR

Two of the following:

Geog. 202 <i>Regional Geography of Anglo-America</i>	3	Geog. 302 <i>Economic Geography</i> .	3
Geog. 304 <i>Geography of Europe</i> .	3		
Geog. 305 <i>Geography of Asia</i> ..	3		

SENIOR YEAR

Geog. 401 *The Teaching of Geography in Secondary School* ...

3

And One of the following:

Geog. 419 <i>Geography of the Soviet Union</i>	3
Geog. 421 <i>Population Problems of the World</i>	3

Total: 21 semester-hours

DEPARTMENTAL COURSE OFFERINGS

Sci. 100 C. *The Earth Sciences*

Cr: 2 s.hrs.

For a description of this course, see page 57.

Geog. 101. *Principles of Geography*

Cr: 2 s.hrs.

This course is designed to introduce the student to the science of geography. It is based upon a world-wide survey of the physical and

THE CURRICULA

cultural elements of the geographic environment. Emphasis is placed upon the adjustments that man makes to that environment, the challenges that it offers, and the responses that are made. Much effort is devoted to the study of maps and their uses.

Geog. 103. Introduction to Cultural Anthropology **Cr: 3 s.hrs.**

Concerned primarily with man and his works, human origins and prehistoric cultures are viewed against the earth background. The concepts of race and culture are examined and defined; the material and non-material traits of primitive societies are analyzed critically; the regional approach is stressed; and emphasis is placed on the delimitation of culture areas. The course provides the fundamentals necessary for future work in cultural geography and anthropology.

Geog. 201. Climatology **Cr: 3 s.hrs.**

This course is divided into two sections: meteorology and climatology. Section one stresses the basic weather elements—temperature, pressure, precipitation, atmospheric circulation, storms. Aspects of weather forecasting are discussed, and weather maps are studied. Section two introduces the student to the major climatic subdivisions of the earth. These are analyzed in detail. Variations in climatic types are emphasized. In both sections use of instruments, adiabatic charts, map interpretation, and competence in the use of climatic classification systems are stressed where necessary.

Geog. 202. Regional Geography of Anglo-America **Cr: 3 s.hrs.**

A regional analysis of Canada, Alaska, and the United States, it serves as an introduction to and a foundation for the study of other continental areas. Emphasis is placed upon the human activities in relation to their natural environment. The student is introduced to the physiographic, climatic, edaphic, and vegetative patterns of regions as well as the cultural and ecological factors. Anglo-America's place in the world economy is analyzed critically.

Geog. 203. Physiography of North America **Cr: 3 s.hrs.**

This course is designed to review basic principles of geomorphology, examine critically the regional approach in the earth sciences, and describe and delineate the physiographic regions of North America. Aspects of climate, soil, flora, and fauna are also treated as bases for regional classification. Topographic map interpretation is stressed. The course provides the physical base for future cultural studies of the continent.

Geog. 204. Soils, Natural Vegetation, and Land Utilization **Cr: 3 s.hrs.**

Designed to introduce students to the edaphic and floral factors in geographical analysis, world-wide distribution patterns are established for each; their significance to man and man's utilization of them are assessed critically.

Geog. 205. Economic Life of Primitive Peoples **Cr: 3 s.hrs.**

This course introduces the student to the relationships that exist between geography, anthropology, and economics. Cultures are examined against the earth's background. Gathering, hunting, fishing, herding, and agricultural cultures are analyzed. Particular attention is paid to the domestication of plants and animals and the economic lifeway of specific peoples.

Geog. 302. Economic Geography **Cr: 3 s.hrs.**

Designed to introduce students to the basic principles of economic geography, emphasis is placed upon the development of agricultural and industrial societies. The importance of the world's food resources, the fossil fuels, the iron and steel industry, the location of industry, transportation, and trade are all stressed. All are viewed and interpreted in terms of the geographic environment.

Geog. 304. Geography of Europe **Cr: 3 s.hrs.**

A regional analysis of Europe, it examines critically the physical and human aspects of the continent's geography. Relations among the European states are discussed, and Europe's place in the world economy is analyzed.

Geog. 305. Geography of Asia **Cr: 3 s.hrs.**

This course is designed as a regional analysis of Asia. It examines the physical and human aspects of the continent's geography. Relations among the Asiatic states are discussed, and Asia's place in the world economy is analyzed.

Geog. 306. Geography of Latin America **Cr: 3 s.hrs.**

It examines critically the physical and human aspects of the continent's geography. Relations among the Latin American states are discussed as are relations with the United States. Latin America's place in the world economy is also analyzed.

Geog. 307. Cartography **Cr: 2 s.hrs.**

This is the basic course in cartography. Students master the use of cartographic instruments and attempt to understand the principles underlying the common types of map projections.

Geog. 401. The Teaching of Geography in Secondary Schools **Cr: 3 s.hrs.**

Designed to aid prospective teachers of geography to gain insight into the method and philosophy of their field; it stresses the problems of teaching the subject matter of geography to secondary-school children. Particular emphasis is placed on the nature of geography, visual aids, reading and landscape, and the teaching of the regional and systematic aspects of the discipline.

Geog. 405. Urban Geography **Cr: 3 s.hrs.**

The student is introduced to the complex forces that have been

THE CURRICULA

and are responsible for the intense concentration of political, social, and economic activities within a small area. This area is then analyzed from the point of view of its evolution, morphology, and function. The changing characteristics of our cities, suburbanization, city-service areas, and city-hinterland interrelationships are also investigated. Emphasis is placed upon research methods and source materials.

Geog. 406. Geology

Cr: 2 s.hrs.

The earth and its geographic, stratigraphic, and structural development throughout geologic time, the record of the evolution of life is interpreted through a study of rocks and fossils.

Geog. 407. Advanced Cartography

Cr: 3 s.hrs.

The emphasis in this course is on modern methods employed in cartographic laboratories, in government, academic institutions, and commercial organizations. The course is designed for students with a background in cartography gained either as a result of experience or through completion of an introductory college cartography course. Prerequisite: GEOG. 307 or equivalent.

Geog. 408A and 408B. Political Geography

Cr: 2 s.hrs. each

These courses deal with the geographic conditions influencing the significant changes in the political divisions of the world. Emphasis is placed on geographic factors influencing racial, religious, commercial, and political adjustment among nations.

Geog. 411. Historical Geography of the United States

Cr: 3 s.hrs.

For students of history, geography, and related disciplines to become familiar with major principles of historical geography, it emphasizes the geographic factors pertinent to understanding of American history. Time-place relationships ranging from pre-Columbian America to the present are surveyed and analyzed critically. Attention is paid to source materials, to cartography of specific times, and to geographical lore and thought.

Geog. 412. Geography of Africa

Cr. 3 s.hrs.

This course includes a topical and regional study of Africa. Emphasis is placed upon the problems of economic adjustment in the tropics. Soils, vegetation, climate, physiography, natural resources, and other aspects of the physical environment are examined in the light of man's habitation of the continent. Relations between Africa and the rest of the world are analyzed.

Geog. 414A and 414B. Advanced Economic Geography

Cr: 2 s.hrs. each

These courses study the influence of the physical environment upon the production of, the trade in, and the utilization of the important agricultural, forest, mineral, and sea products, and the manufactured commodities of the world.

Geog. 416. Conservation of Natural Resources**Cr: 3 s.hrs.**

This course provides an opportunity for students of the social and physical sciences to study the natural resources of the United States. Exploitation and conservation are both stressed. Our major resources are reviewed in terms of use, needs, and future developments. Consideration is given to the growth of legal and social awareness of the need for conservation practices in America.

Geog. 418. Regional Geography of North America**Cr: 2 s.hrs.**

Detailed regional treatment of the continent of North America, the human activities of the various regions in relation to their natural environment and the relations of the regions to each other are studied. Attention is given to the techniques of presenting the material and the use of geographic tools in the treatment of the subject-matter.

Geog. 419. Geography of the Soviet Union**Cr: 3 s.hrs.**

This course is designed as a regional analysis of the Soviet Union. It examines the physical and human aspects of Soviet geography. Emphasis is placed on economic regions. Relations between the European states and the Soviet Union are discussed, and Russia's place in the world economy is analyzed.

Geog. 420. Field Geography and Conservation**Cr: 2 s.hrs.**

The relation of relief features of northern New Jersey, the location of natural resources, and the way in which land use and population distribution follow these patterns is studied. Emphasis is given to the reading and interpretation of topographical maps and aerial photographs and to a study of the United States Geological and Soil Surveys of this region. By means of an actual land-use survey the student comes to appreciate the problems of conservation as they grow out of man's use of natural resources.

Geog. 421. Population Problems of the World**Cr: 3 s.hrs.**

An intensive examination of the factors which influence the present-day distributional pattern of the world's people and the political, economic, and social consequences of this development are considered. Particular attention is placed on man-land relationships as related to population problems of contemporary nations.

Geog. 422. Geography of the American Indian**Cr: 3 s.hrs.**

This course is designed to survey the culture of the American Indian from the Ice Age to the Reservation in relation to his geographic environment. It affords an insight into the geography and cultural history of North America prior to the coming of the white man, deals with the problems experienced and created by alien cultures when they meet, and culminates with the Indian problems of the present day. It serves to introduce methods employed in interdisciplinary attacks upon cultural problems.

THE CURRICULA

Geog. 424. Geography of New Jersey

Cr: 3 s.hrs.

A detailed topical and regional study of New Jersey, physiography, climate, soils, flora, fauna, agriculture, industry, trade, population, and relation with neighboring states are studied. On the basis of the data examined an attempt is made to delineate the geographic regions of the state. Emphasis is placed on the relationship between New Jersey's people and New Jersey's earth.

Geog. 425. Geography of Exploration and Settlement

Cr: 3 s.hrs.

This course is designed to survey the great age of exploration and settlement of lands overseas inaugurated by the Columbian voyages. Its major themes are: knowledge concerning the lands of the earth, the unfolding of the world map, the type settlements erected by Europeans in distant lands. Attention is given to motive for exploration, methods of navigation and travel, routes explored, and the cultural features marking European settlement.

Geog. 426. Historical Geology

Cr: 3 s.hrs.

This course is designed to aid the prospective teacher in acquiring an understanding of the systematic evolution of the present landscape, from the local area to the entire North American continent. Other purposes are to establish the concepts of vast periods of time, of the development of life, of great mountain-making movements, and of the return of all to the sea.

THE DEPARTMENT OF HOME ECONOMICS

Hall (*Chairman*), Guthrie, Hatzenbuhler, Oppenheim, Page, Ruslink

The Department of Home Economics has a two-fold purpose: (1) to improve individual and family living and (2) to prepare students for a career in teaching home economics in elementary and secondary schools.

Graduates with this major receive a vocational certificate enabling them to teach in either a general or vocational home economics program in New Jersey. They also are prepared to teach any or all of the areas comprising home economics; i.e., foods and nutrition, clothing and textiles, family finance, home management and household equipment, family relations and child development.

Although the Department offers no minor, it invites students from other departments to elect courses in home economics.

The Home Economics Department has planned experiences for majors to supplement classroom work as follows:

1. *Summer Clothing Practicum*

After having completed HOME ECONOMICS 102, *Introduction to Clothing Construction*, garments are to be constructed during the summer months. The instructor assists each student in planning and evaluating this experience. These garments are submitted for evaluation during the first week of the semester in which the student is enrolled in HOME ECONOMICS 204, *Advanced Clothing Selection and Construction*.

2. *Summer Work Practicum*

Students supplement course work with work experience. This consists of at least 300 hours of summer employment, with or without pay, in a selected area to meet the student's educational needs. Usually this can be accomplished by eight weeks of employment. Preferably this work should be done during the summer preceding the senior year. Students should sign up with the faculty member in charge during the spring semester. This experience is evaluated during the first two weeks of the fall semester of the senior year.

3. *Faculty Teas*

Each student is responsible for planning, organizing, and supervising the serving of at least one faculty tea. Preferably this should occur during the junior and senior years.

4. *Observations in College High School*

Junior and senior students observe and participate in College High School through demonstrations, arrangement of bulletin boards, and laboratory supervision. This correlates with class work in HOME ECONOMICS 401A and 401B.

Students majoring in home economics are not permitted to hold off-campus jobs that interfere with the normal activities of teaching during junior or senior practicum. Residence in the home-management house generally prevents part-time employment off campus.

THE CURRICULA

HOME ECONOMICS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 100A <i>Dev. of World Civ.</i> ..	3	Soc. St. 100B <i>Dev. of World Civ.</i> ..	3
Speech 100D <i>Fund. of Speech</i> ...	3	Eng. 100C <i>Fund. of Writing</i> ...	3
F.A. 100 <i>Intro. to Visual Arts</i> ..	3	Music 100 <i>Music Appreciation</i> ...	2
Ed. 100 <i>Mental Hygiene & Personal Adj.</i>	2	Science 100C <i>The Earth Sciences</i> ..	2
Chem. 103 <i>Chemistry for Home Economics, I</i>	3	Chem. 104 <i>Chemistry for Home Economics, II</i>	3
H.E. 101 <i>INTRODUCTION TO HOME ECONOMICS</i>	2	H.E. 102 <i>INTRO. TO CLOTHING CONSTRUCTION or</i>	3
		H.E. 201 <i>INTRO. TO FOODS & NUTRITION</i>	
	16½		16½

SUMMER CLOTHING PROJECT

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 200A <i>Contemp. Am. Life</i> ..	3	Soc. St. 200B <i>Contemp. Am. Life</i> ..	3
Ed. 201 <i>Human Dev. & Behav., I</i> ..	3	Ed. 202 <i>Human Dev. & Behav., II</i> ..	3
Elective	2	Elective	2
Biol. 209 <i>HUMAN BIOLOGY</i>	3	Biol. 210 <i>ELEMENTARY BACTERIOLOGY</i>	4
H.E. 102 <i>INTRO. TO CLOTHING CONSTRUCTION or</i>	3	H.E. 304 <i>HOME MANAGEMENT & HOUSEHOLD EQUIPMENT</i>	2
H.E. 201 <i>INTRO. TO FOODS & NUTRITION</i>		H.E. 301 <i>THE CHILD IN THE FAMILY or</i>	3
H.E. 301 <i>THE CHILD IN THE FAMILY or</i>	3	H.E. 302 <i>MARRIAGE & FAMILY RELATIONS</i>	
H.E. 302 <i>MARRIAGE & FAMILY RELATIONS</i>			
	17½		17½

SUMMER WORK EXPERIENCE

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Prins. & Methods of Teaching</i>	3
H.E. 202 <i>MEAL PLANNING</i>	3	Ed. 403A <i>Student Teach. & Jr. Practicum (4 wks. off campus)</i> ..	3
H.E. 204 <i>ADVANCED CLOTHING SELECTION AND CONSTRUCTION.</i> ..	3	H.E. 305 <i>FAMILY FINANCE</i>	2
H.E. 401A <i>HOME ECONOMICS EDUCATION, I (Junior Methods)</i>	1	Lang. 300 <i>Foundations of Language</i>	2
H.E. 203 <i>TEXTILES</i>	2	H.E. 401B <i>HOME ECONOMICS EDUCATION, II (Senior Methods)</i>	2
H.E. 303 <i>HOUSING & HOME FURNISHINGS</i>	3	Elective	2
Elective	2		
	16		15

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 4?? <i>Edu. Elective</i>	3
H.E. 403 <i>HOME MANAGEMENT HOUSE RESIDENCE</i>	3	Elective <i>Humanities</i>	2
Ed. 403B <i>Student Teaching (6 weeks off campus)</i>	5	Math. 400 <i>Elements of Statistical Reasoning</i> ..	2
Eng. 100G <i>Western World Lit.</i> ..	3	H.E. 402 <i>NUTRITION & GROUP FEEDING</i>	2
Elective	2	Elective	2
		H.E. 404 <i>VOCATIONAL EDUCATION</i> ..	2
	16		13

Total: 128 semester-hours

DEPARTMENTAL COURSE OFFERINGS**Home Ec. 101. Introduction to Home Economics** **Cr: 2 s.hrs.**

A study is made of the history, scope, and professional requirements and opportunities in the field of home economics. Visits are made to public-school programs in home economics.

Home Ec. 102. Introduction to Clothing Construction **Cr: 3 s.hrs.**

This course considers the fundamentals of clothing construction applied to garments using fabrics and commercial patterns suitable to the previous experience of the student. The use and care of the sewing machine and other equipment and fitting and altering of patterns are included.

Home Ec. 105. Principles of Clothing Selection for the Individual**Cr: 2 s.hrs.**

This course is open to all college students. Choosing appropriate clothing for different activities and considering choice and use of color, design, and fabric in relation to individual needs are stressed. Choices of accessories, grooming care of clothing, budgeting, and consumer problems are discussed.

Home Ec. 201. Introduction to Foods**Cr: 2 s.hrs.**

A study of food selection, purchasing, and preparation for the family with emphasis on techniques of preparation, this course is a prerequisite for future foods courses.

Home Ec. 202. Meal Management**Cr: 3 s.hrs.**

Planning, marketing, preparing, and serving nutritionally adequate and attractive meals for the family are considerations of this course. Included are a study of the nutritive needs of particular family members, the use of food additives, the history of the legal means used to protect our food supply, the aesthetics and psychology involved in making meals appealing, and the coordination of table appointments. Considerable emphasis is placed on good management of time, energy, and equipment.

Home Ec. 203. Textiles**Cr: 2 s.hrs.**

This course studies the factors that influence durability, use, and price of household and clothing fabrics. Recognition and analysis of fibers, fabrics, and finishes, centered around problems in the selection and buying of textiles for clothing and household purposes are included. Consumer education in the field of textiles and textile economics is stressed. Prerequisites: CHEM. 103 and 104.

Home Ec. 204. Advanced Clothing Selection and Construction**Cr: 3 s.hrs.**

Advanced construction principles with an intensive study of practical methods of solving fitting problems are treated in this course. Application is made of the principles of costume design in

THE CURRICULA

clothing selection of ready-to-wear clothing as well as in the construction of advanced clothing projects. Prerequisite: HOME Ec. 203.

Home Ec. 205. Foundations of Marriage **Cr: 2 s.hrs.**

This course is planned for college students other than home economics majors, consideration is given to factors in choosing a mate and adjustments in marriage. Credit cannot be granted for both home economics 302 and 205.

Home Ec. 301. The Child in the Family **Cr: 3 s.hrs.**

The purpose of this course is to develop an understanding of the role of the family in meeting the basic needs of children and in guiding their development. Opportunities are provided for supervised observation and participation with groups of pre-school children.

Home Ec. 302. Marriage and Family Relations **Cr: 3 s.hrs.**

Emphasis is on preparation for marriage; factors influencing marriage adjustment; and family relations throughout the family life cycle. Resource people and films are used. Open each semester to a limited number of men students in addition to home economics major students. Credit cannot be granted for both Home Economics 205 and Home Economics 302.

Home Ec. 303. Housing and Home Furnishing **Cr: 3 s.hrs.**

Factors affecting the housing needs of today's families; economic, social and psychological influences; family life cycle, family differences as they affect cost, size, space organization, and construction materials used are discussed. How to recognize quality and utility in the selection, buying, and arrangement of furnishings in various types of homes are topics of study.

Home Ec. 304. Home Management and Household Equipment

Cr: 2 s.hrs.

The purpose is to develop an understanding of the managerial process and its role in effective family and individual living. Emphasis is placed on decision-making and effective and economical use of resources found in the home; their selection, use, care, and storage. Opportunities are provided to evaluate various kinds of equipment. Recommended prerequisite: Physics 306. Household Physics.

Home Ec. 305. Family Finance **Cr: 2 s.hrs.**

This course is an introduction to the family as an economic unit. Topics included are: the family-life cycle and financial responsibilities, financial planning, the family as a consumer, family security, the use of credit, and the family in the national economy.

Home Ec. 306. Nutrition and Health **Cr: 2 s.hrs.**

This is a study of human nutrition including its importance to optimum physical and emotional health, indications of good nutrition, body requirements of various food elements, planning the family diet,

diet patterns for various age groups, and specific conditions. This course is for non-home economics majors.

Home Ec. 307. Nutrition

Cr: 2 s.hrs.

This course is designed to broaden the student's appreciation of the importance of good nutrition to individual well-being. A resume of basic scientific nutrition information together with its applications to specific age groups is included. An investigation is made of various deficiency diseases and current problems in nutrition. Consideration is given to discussion of effective methods of nutrition education. Only home economics majors may register for this course.

Home Ec. 310. Experimental Foods

Cr: 3 s.hrs.

This is a comparative approach to methods of food preparation with emphasis on newer techniques. It is slanted to the needs of the prospective teacher. Each student does experimental laboratory work on selected phases of food preparation.

Home Ec. 401A. Home Economics Education I (Junior Methods)

Cr: 1 s.hr.

This course is designed for the prospective teacher, emphasis is placed on Junior High School teaching. Topics are: unit and lesson plan construction, use of audio-visual materials, instructional materials and teaching techniques. Observation and participation at the College High School are co-ordinated with this course.

Home Ec. 401B. Home Economics Education, II (Senior Methods)

Cr: 2 s.hrs.

This course is built upon Home Economics 401A to help prospective teachers develop effectiveness in the planning and organization of a Home Economics program. Emphasis is placed on Senior High School teaching. Topics included are curriculum planning, planning space and equipment, administration of a Home Economics department and adult programs in Home Economics.

Home Ec. 402. Group Feeding

Cr: 2 s.hrs.

This course includes a study of adequate menu planning for large groups, use of standardized recipes, quantity buying and preparation of foods, and problems involved in school-lunch management. Prerequisite: Home Ec. 202.

Home Ec. 403. Home Management House Residence

Cr: 3 s.hrs.

This course provides opportunities for the practical application of the knowledge and skills gained in various phases of home economics. Experience is gained in the analysis of activities in the home in view of specific goals and satisfactions desired and the economical use of human and material resources to accomplish these goals. Students have an opportunity to identify managerial problems, evaluate various means of solving problems, and experimentation in planning and carrying out selected alternatives. Prerequisites: Home Economics

THE CURRICULA

202, Home Economics 304, Home Economics 305, and Preparation for Home Management House Residency.

Home Ec. 403A. Home Management for Married Students Cr: 3 s.hrs.

Married students with family responsibilities are not required to reside in the home management house. They are, however, expected to take part in many of the activities of the home management house and to study and solve additional managerial problems in their own homes. Individual study will include setting family goals and the analysis of how these goals may be achieved at present and in the future. (Students will not receive credit for Home Ec. 403 and 403A.) Prerequisites for 403A are the same as for 403.

Home Ec. 404. Vocational Education Cr: 2 s.hrs.

This course is submitted to fulfill the requirements for the New Jersey state plan for certification of home economics teachers which reads: "A course in Principles of Vocational Education must be taken for vocational certification."

A history of the development, organization, and purposes of vocational programs and implications for future growth are presented. A study is made of those characteristics of the vocational home-making program which set it apart from the non-vocational home-making program. The role of the U. S. Office of Education, Vocational Division, in the interest of home economics is defined.

Home Ec. 405. Advanced Child Development Cr: 2 s.hrs.

This course includes observation and participation in the activities of a nursery school. It is based on experience such as: observation and helping with daily routine, preparation of food, directing play activities, musical activities, story telling, and similar activities.

Home Ec. 406. Tailoring Cr: 2 s.hrs.

Fundamental processes and procedures for constructing tailored garments and the differences between dressmaking and tailoring techniques are emphasized. A comparison is made between factory-made garments and custom tailoring. Prerequisite: Home Ec. 204.

Home Ec. 407. Consumer Information Cr: 2 s.hrs.

The consumer problems of families and current practices of consumer groups are examined as well as factors influencing consumption. Emphasis is placed on developing effectiveness as a consumer.

Home Ec. 408. Family Health and Home Nursing Cr: 2 s.hrs.

This course is designed for home economics majors. Common health problems are considered with emphasis on the family approach. Simple methods for home care of the ill and convalescent are included. Extensive consideration is given to methods of teaching home nursing and family health at the secondary level.

Home Ec. 409. Current Problems in Home Economics Teaching**Cr: 2 s.hrs.**

The purpose of the course is to help in-service teachers and prospective teachers of home economics plan and teach an effective home-making program. Topics included are: planning a well-rounded and effective program of home economics; using the New Jersey curriculum guide in program planning; evaluating audio-visual materials; working effectively in the short period; working with exceptional children, both retarded and above average; correlating the home-making program with other departments in the school; planning and reorganizing home economics departments; and reviewing new methods of teaching home economics. Prerequisite: Home economics teaching experience or student teaching.

Home Ec. 420. Teaching Family Living in the Public Schools**Cr: 2 s.hrs.**

Subject matter considered in family living classes in elementary, junior and senior high schools and experience with techniques to prepare boys and girls for successful family living are offered.

Home Ec. 421. New Developments in Clothing and Textiles**Cr: 2 s.hrs.**

Courses of study in elementary and secondary schools are examined for present practices used in the teaching of clothing and textiles. An attempt is made to stimulate originality and to show how clothing and textiles can be interrelated to other areas of home economics. Actual plans for teaching a comprehensive program in clothing and textiles in the elementary and secondary schools are formulated. Prerequisites: Home Ec. 102, 201, 401A or equivalents.

Home Ec. 423. Seminar in the Supervision of Home Economics**Cr: 2 s.hrs.**

For cooperating teachers planning to work with home economics student teachers in the pre-service program at Montclair State College, the course deals with principles, methods, and techniques of leadership in improving the programs of home economics education.

Home Ec. 424. Workshop in Home Economics Education:**Educables—Retarded Children****Cr: 3 s.hrs.**

This course includes a study of the general characteristics of the educable retarded child, teaching for individual differences, development of methods and specific techniques, and materials for this child in home economics. Suitable evaluation instruments are considered. Opportunity is provided for observing and working with children in a classroom situation.

THE DEPARTMENT OF INDUSTRIAL ARTS

Frankson (*Chairman*), Butler, Duffy, Earl, Olsen, Seferian, Streichler

Industrial Arts emphasizes the relation of the cultural aspects of arts to the development of civilization and the vital part that industry plays in our present day technical society. Creative satisfaction resulting from well-designed and carefully executed projects are provided for in the comprehensive industrial arts laboratory.

The industrial arts curriculum offers opportunities for the student to broaden his concepts of the industrial world in which he lives. This is achieved through experiences in the graphic arts and drawing, woods and industrial crafts, and metals and powers areas. It is assumed that the industrial arts course offerings, for effective learning experiences, follow each other in sequence. It is presupposed that the student enrolling as an industrial arts major has had preliminary training. In addition to increasing his technical knowledge and skill, the student is directed in the techniques of teaching industrial arts in the elementary, junior, and senior high schools.

Students applying for admission to the industrial arts department are encouraged to gain industrial experience. Those who complete the industrial arts curriculum are prepared to teach industrial arts in the elementary schools, junior high schools, and the senior high schools of New Jersey.

INDUSTRIAL ARTS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	½
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Music 100 <i>Music Appreciation</i> ..	2	F.A. 100 <i>Intro. to the Visual Arts</i> ..	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Sci. 100A <i>Physical Science or Sci. 100B Biological Science</i> ..	4
Sci. 100C <i>The Earth Sciences</i> ..	2	Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2
I.A. 101 <i>INTRO. TO INDUSTRIAL ARTS</i>	2	I.A. 112 <i>GRAPHIC ARTS & DRAWING, II</i>	4
I.A. 111 <i>GRAPHIC ARTS & DRAWING, I</i>	4		
	<hr/> 16½		<hr/> 16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	½	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	½
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. & Behavior, I</i>	3	Ed. 202 <i>Human Dev. & Behavior, II</i>	3
H.Ed. 100 <i>Healthful Living</i> ..	2	Math. 300 <i>Social Uses of Mathematics</i>	2
I.A. 221 <i>WOOD AND CRAFTS, I</i> ..	4	I.A. 222 <i>WOOD AND CRAFTS, II</i> ..	4
I.A. 231 <i>METALS AND POWER, I</i> ..	4	I.A. 232 <i>METALS AND POWER, II</i> ..	4
	<hr/> 16½		<hr/> 16½

JUNIOR YEAR

Ed. 304X <i>Prins. & Methods of Teaching</i>	3	Ed. 303 <i>Teacher in School & Community</i>	3
I.A. 301 <i>PRINCIPLES OF INDUSTRIAL ARTS</i>	2	Ed. 403A <i>Student Teaching—Junior Practicum (4 weeks off campus)</i>	3
I.A. 313 <i>GRAPHIC ARTS & DRAWING, III</i>	4	I.A. 302 <i>CURRICULUM & TEACHING OF I.A.</i>	2
I.A. 333 <i>METALS AND POWER, III</i> ..	4	I.A. 323 <i>WOOD AND CRAFTS, III</i> ..	4
Electives	4	Speech 100D <i>Fundamentals of Speech</i>	3
	<hr/> 17		<hr/> 15

SENIOR YEAR

Ed. 401 <i>Dev. of Educational Thought</i>	3	Lang. 300 <i>Foundations of Language</i>	2
Ed. 403B <i>Student Teaching (6 weeks off campus)</i>	5	Math. 400 <i>Statistics</i>	2
Eng. 100G <i>Western World Literature</i>	3	Ed. 4?? <i>Edu. Elective</i>	3
Elective (Industrial Arts elective will be offered)	4	Elective—Mathematics or Science ..	2
	<hr/> 15	Elective—Humanities ..	2
		Elective—(Industrial Arts elective will be offered)	4
			<hr/> 15

Total: 128 semester-hours

THE CURRICULA

DEPARTMENTAL COURSE OFFERINGS

Ind. Arts 101. Introduction to Industrial Arts **Cr: 2 s.hrs.**

An introduction to the nature and content of the industrial arts program, laboratory techniques for individuals and groups, organizational problems in the laboratory and the professional aspects in a career as an industrial arts teacher are considered.

Ind. Arts 111. Graphic Arts and Mechanical Drawing, I **Cr: 4 s.hrs.**

Graphic Arts introduces design, layout, composition and press-work. Mechanical drawing is a study of technical sketching and basic types of projection by mechanical instruments.

Ind. Arts 112. Graphic Arts and Mechanical Drawing, II **Cr: 4 s.hrs.**

Graphic Arts encompasses all phases of letterpress printing and photography. Mechanical drawing embodies the development of surfaces and intersections, revolutions and perspective projection.

Ind. Arts 221. Woods and Industrial Crafts, I **Cr: 4 s.hrs.**

An introductory course in the woods and industrial crafts area. Emphasis in the woods area is on basic standard hand woodworking procedures. In the industrial crafts area, which includes ceramics, plastics, and textiles, emphasis is upon basic hand procedures, formulation, and manipulation. Study is in relation to design, skills, tools, materials, techniques, procedures and safety.

Ind. Arts 222. Woods and Industrial Crafts, II **Cr: 4 s.hrs.**

The scope and content of this second experience is broadened to further develop the student. Machine experiences include operation, safety and maintenance. A technical and industrial approach is used to assist the student in the exploration, experimentation and interpretation of the areas of wood, plastics, ceramics, and textiles.

Ind. Arts 231. Metals and Power, I **Cr: 4 s.hrs.**

Consists of experiences in three major areas: external combustion engines, electricity including electrostatics, electrochemistry and direct current rotating equipment; and metal including machine shop, sheet metal, foundry forge and welding.

Ind. Arts 232. Metals and Powers, II **Cr: 4 s.hrs.**

Reciprocating internal combustion engines, four stroke cycle and two stroke cycle engines; electricity including power transmission, rotating equipment and house wiring; and metals involving work in those areas not previously studied.

Ind. Arts 301. Principles of Industrial Arts Education **Cr: 2 s.hrs.**

A study of the principles of industrial arts and their relationship to general education. Emphasis is placed on the development of the child as a person, basic needs of children, importance of creative interests, how to motivate, the types of materials used, behavior changes as outcomes and organizing laboratory experiences.

Ind. Arts 302. Curriculum and Methods of Teaching Industrial Arts**Cr: 2 s.hrs.**

An overall study of the industrial arts objectives, selection of subject matter, starting a class, giving demonstrations, using visual and auditory aids, selecting the project, developing instructional materials, analyzing the personnel organization, keeping records, planning the laboratory and evaluating results in industrial arts.

Ind. Arts 313. Graphic Arts and Mechanical Drawing, III **Cr: 4 s.hrs.**

Graphic Arts provides opportunity to study the areas of offset printing, bookbinding and silk screening. Architectural and engineering drawing are emphasized in this third experience.

Ind. Arts 323. Woods and Industrial Crafts, III**Cr: 4 s.hrs.**

Advanced work including understanding the industrial techniques related to, and associated with, the areas of wood, plastics, ceramics and textiles. Emphasis in this third experience is upon the industrialized and mechanized approaches to further develop an understanding of, and an insight into, these areas.

Ind. Arts 333. Metals and Power, III**Cr: 4 s.hrs.**

Involves reaction and exotic engines; electronics including TRF and superhetrodyne. All metals used extensively in the manufacture of the above are studied and the related technical skills involved are developed in the laboratory.

Ind. Arts 401. Comprehensive General Shop for Elementary and Junior High Schools**Cr: 4 s.hrs.**

Laboratory experiences are geared to the principles and philosophy of the general shop and the elementary and junior high levels. Students plan and develop educational experiences which are related to the everyday living of both boys and girls.

Ind. Arts 402. Comprehensive General Shop for Senior High School**Cr: 4 s.hrs.**

Students are encouraged to develop new skills or perfect those already developed in the numerous technical areas in the general shop on the high school level. Instructional materials and individual and group educational experiences are planned and developed.

Ind. Arts 407. Field Studies of Industry**Cr: 4 s.hrs.**

A broad range of industrial firms are visited to note and evaluate the processes used, the materials employed, the working conditions instituted, and the labor relations practiced. Every attempt is made to visit representative industries in the metropolitan area.

Ind. Arts 411. Industrial Photographic Techniques**Cr: 2 s.hrs.**

Photographic techniques in industry are reviewed in this laboratory course. Tools, materials, and equipment are used and evalu-

THE CURRICULA

ated in connection with a variety of experience in industrial photography and consideration of record developments in this field.

Ind. Arts 421. Jewelry Making and Lapidary **Cr: 2 s.hrs.**

Students have the opportunity to develop lapidary and jewelry-making skills. Operational techniques involve casting, forming, and designing pieces of silver, gold, and other metals. Lapidary experiences include the developments of skills in sawing, polishing, and mounting of stones to exhibit their desirable qualities.

Ind. Arts 431. Advanced Electronics **Cr: 2 s.hrs.**

A study of alternating current and direct current principles and their application in electronics. Students construct and trouble shoot radio and television circuitry using a variety of test instruments.

Ind. Arts 442. Conservation of Basic Industrial Materials **Cr: 2 s.hrs.**

Students, while living for ten days at the New Jersey State School of Conservation, Stokes State Forest, study the origin, development, use and consumption of basic materials as they exist in nature, by taking field trips to resources and industries, by employing a variety of instructional aids, and by talking with specialists in each area.

Ind. Arts 443. The Use and Processing of Basic Materials By Modern Industry **Cr: 2 s.hrs.**

Students live for ten days at the New Jersey State School of Conservation. Study is devoted to recognition, use and processing of basic natural materials, such as ores, wood, fuels, and agricultural products to improve their value as industrial materials, such as leather and plastics. The course is developed through the use of films, field trips, and discussion with industry specialists.

Ind. Arts 461. Introductory Mechanical Drawing **Cr: 2 s.hrs.**

The course, open to the general college student, is devoted to the fundamentals of sketching, orthographic projection, sectional views, auxiliary views, isometric views, and surface developments are covered. The student, provided he has the necessary background, may devote his time to a study in depth of one or more of the above areas. No previous experience is necessary.

Ind. Arts 462. Introductory Woodworking **Cr: 2 s.hrs.**

The course, open to the general college student, provides practical experiences in the use of basic woodworking tools and materials. No previous experience is necessary.

THE DEPARTMENT OF MATHEMATICS

Meserve (*Chairman*), Anderson, Bening, Clifford, Cohen, Humphreys, Maletsky, Ott, Pettofrezzo, Sobel, Westphal, Williams

Prospective teachers of secondary-school mathematics can achieve a broad cultural background, a thorough understanding of their chosen field of work, and a good working knowledge of the problems, techniques, and methods of procedure in teaching mathematics in the secondary school.

Mathematics for a student in teacher education differs little in actual content from that for a student in a liberal arts program. The course of study in mathematics provides for a study of topics in college mathematics with continual emphasis on their use as a background for teaching. The courses offered by the Department of Mathematics are taught with the following objectives in view:

1. To give the student a review of and practice in those topics in mathematics which he will be required to teach. This is best done by having such review an incidental part of the advanced work in mathematics rather than a repetition of high school subject-matter.
2. To provide an understanding of the mathematical concepts which underly those the student will be required to teach.
3. To note that many phases of college mathematics are the extension or continuation of similar topics in high school mathematics.
4. To give the student that self-confidence which is the concomitant of a broad knowledge of subject-matter beyond minimum requirements.
5. To supply a cultural background and an awareness of the specific contributions which mathematics has made to civilization.
6. To make the student aware, through observation and participation in teaching in College High School, of the character and diversity of the problems arising in teaching mathematics to secondary school pupils.
7. To integrate the work with other courses, particularly science, social studies, and economics, so that the student will realize the effectiveness of mathematics as a tool in solving scientific and sociological problems.

No student should attempt to major in mathematics who has not demonstrated his ability by his high school work in at least elementary and intermediate algebra, geometry, and trigonometry.

THE CURRICULA

MATHEMATICS MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 100B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 100A <i>Dev. of World Civilization</i>	3	Soc. St. 100B <i>Dev. of World Civilization</i>	3
Eng. 100C <i>Fundamentals of Writing</i>	3	Speech 100D <i>Fundamentals of Speech</i>	3
Sci. 100A <i>Physical Science or* Sci. 100B Biological Science</i> ..	4	Ed. 100 <i>Mental Hygiene & Pers. Adj.</i>	2
Mus. 100 <i>Music Appreciation</i> ...	2	F.A. 100 <i>Intro. to the Visual Arts</i>	3
MATH. 101 MATHEMATICAL ANALYSIS, I**	4	MATH. 102 MATHEMATICAL ANALYSIS, II	4
	16 1/2		15 1/2

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i>	1/2	Phys. Ed. 200B <i>Phys. Ed. Activities</i>	1/2
Soc. St. 200A <i>Contemporary American Life</i>	3	Soc. St. 200B <i>Contemporary American Life</i>	3
Ed. 201 <i>Human Dev. and Behavior, I</i>	3	Ed. 202 <i>Human Dev. and Behavior, II</i>	3
H.Ed. 100 <i>Healthful Living</i>	2	Sci. 100C <i>The Earth Sciences</i> ...	2
Electives*	4	Electives	4
MATH. 201 CALCULUS, I	4	MATH. 202 CALCULUS, II	4
	16 1/2		16 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Eng. 100G <i>Western World Literature</i>	3
Electives	4	Electives	4
MATH. 307 <i>INTRO. TO MATHEMATICAL STATISTICS</i>	3	MATH. 308 <i>THE TEACHING OF JUNIOR HIGH SCHOOL MATHEMATICS</i>	2
MATH. 302 <i>HIGHER ALGEBRA</i> ...	4	MATH. 301 <i>MODERN COLLEGE GEOMETRY</i>	4
	16		16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Elective— <i>Math. or Science*</i>	2	Ed. 4?? <i>Edu. Elective</i>	3
Elective— <i>Humanities</i>	2	Elective	2
Elective	3	MATH. 404 <i>MODERN MATHEMATICAL LITERATURE</i>	2
MATH. 401 <i>THE TEACHING OF MATHEMATICS IN SECONDARY SCHOOL</i>	3		15
MATH. 402 <i>APPLICATIONS OF MATHEMATICS</i>	3		
	16		

Total: 128 semester hours

*9 semester-hours of electives are required in a secondary teaching field other than the major. While students are free to elect an area in consultation with their advisor they are urged to take Physics 101, 102, 402, and a Physics elective to satisfy this 9-hour requirement and the general education requirement in Science (i.e. replacing Sci. 100A or Sci. 100B).

**Prospective majors are encouraged to demonstrate their readiness for Analytic Geometry and Calculus (Math. 102) on C E E B Advanced Mathematics Examinations. At least half of each entering class are expected to start their college mathematics with Math. 102, to Study Math. 102, 201 and 202 their first three semesters, and to take 4 s.hrs. of electives in Mathematics to replace the time that would have been spent on Math. 101.

Students selecting mathematics as a field of minor interest should consult with the Chairman of the Mathematics Department before beginning such work. The following courses are required for all mathematics minors: Math. 101, 102, 201, 202, 401, and one two-point elective, making a total of 21 semester-hours.

Mathematics majors and minors are required prior to the completion of Math. 301 to demonstrate their proficiency in the geometry of three-dimensional Euclidean space, either on a test administered at the first departmental meeting of the year or in Math. 304.

All students are required to take some mathematics courses as part of their requirements in general education. Selection of such courses often depends upon the student's major field. Students may also qualify for special work in mathematics by taking a placement examination. Most students take both Math. 300 and 400 before taking an elective course in either mathematics or science. Non-mathematics majors may take Math. 310 in lieu of Math. 300.

DEPARTMENTAL COURSE OFFERINGS

Math. 101. Mathematical Analysis **Cr: 4 s.hrs.**

Required of majors not ready for Math. 102. The topics include: logic and sets, the real number system, relations and functions, trigonometry and circular functions, the binomial theorem, inverse functions, elementary theory of equations and inequalities, complex numbers, analytic plane geometry, and basic concepts of limits.

Math. 102. Calculus, I **Cr: 4 s.hrs.**

Required of majors and minors. The topics include: differentiation, integration, maxima, minima, related rates, and differentials.

Math. 103. Mathematics for Science Majors, I **Cr: 3 s.hrs.**

This course develops understandings and skills in the mathematics necessary for effective work in the physical and biological sciences. Its emphasis is on the topics of mathematical analysis preliminary to a thorough course in differential and integral calculus. The topics are: polynomial functions of the first and second degrees with a consideration of those of higher degrees; direct, inverse, and joint variation and their applications in the sciences; scientific notation; computational aids as logarithms, slide-rule, mathematical tables, and calculating machines; and a study of exponential functions.

Math. 104. Mathematics for Science Majors, II **Cr: 3 s.hrs.**

A continuation of Math. 103, the topics are: trigonometric functions, elements of analytic geometry and related material of differential calculus which aids in the analysis of polynomial functions as applied to the physical and biological sciences, consideration of the fundamentals of elementary statistics, frequency distributions, measures of central tendencies and variability, probability, sampling, statistical inference, regression lines, and correlation analysis.

THE CURRICULA

Math. 201. Calculus, II

Cr: 4 s.hrs.

Required of majors and minors; prerequisite Math. 102. The principal topics include: applications of the definite integral, transcendental and hyperbolic functions, methods of integration, and the use of calculus in plane analytic geometry.

Math. 202. Calculus, III

Cr: 4 s.hrs.

Required of majors and minors; prerequisite Math. 201. The principal topics include: the use of calculus and vectors in solid geometry, partial differentiation, multiple integration, infinite series, and differential equations.

Math. 209. Introduction to Finite Mathematics

Cr: 2 s.hrs.

The emphasis in this course is upon finite differences and processes. These are compared with the infinitesimals and limiting processes of calculus. The significance of finite processes has been greatly enhanced by electronic machine computation. Machine computation and the use of these procedures in treating topics of secondary school mathematics are considered. Prerequisite: Math. 102.

Math. 211. Difference Equations

Cr: 2 s.hrs.

This course is intended to acquaint the student with the elementary concepts of difference equations. Applications are taken primarily from economics, psychology, and sociology. Among the topics included are: the amortization of debts, the growth of national income, pure inventory cycles, the Bush-Mosteller probability model for simple learning, and the Weber-Fechner Law governing stimulation and response. Prerequisite: Math. 102.

Math. 215. Methods of Computation

Cr: 1 s.hr.

This course gives the student an opportunity to become proficient in the use of the slide rule and the desk calculator. The major portion of the course is devoted to developing skill in the use of the slide rule. Students meet once a week for two hours during the semester. At least one hour of each double period is devoted to supervised drill in the use of the slide rule or desk calculator.

Math. 300. The Social Uses of Mathematics

Cr: 2 s.hrs.

For a description of this course, see page 57.

Math. 301. Modern College Geometry

Cr: 4 s.hrs.

This course gives the student a thorough preparation for teaching geometry. Synthetic and coordinate methods for solving problems are carefully analyzed and applied. There is an intensive review of the content and structure of high school geometry. Most of the course is concerned with advanced topics of Euclidean geometry, the foundations of geometry, non-Euclidean geometry, projective and affine geometries, and topology. Prerequisite: Math. 102.

Math. 302. Higher Algebra

Cr: 4 s.hrs.

This course develops an understanding of the fundamental concepts of algebra. Topics include the language of sets, development of the complex number system starting from Peano's postulates for the natural numbers, algebraic structures, basic results in the theory of numbers, the theory of polynomials, elements of the theory of equations, matrices, and determinants. Prerequisite: Math. 102.

Math. 304. Solid Geometry

Cr: 2 s.hrs.

This course is a study of the usual topics of solid geometry from a modern point of view.

Math. 307. Probability and Statistics

Cr: 3 s.hrs.

The major emphasis in this course is the study of the probability theory of finite sample spaces together with limited applications to statistical theory. Topics include: meanings of chance and variability, elements of combinatorial analysis, probability theory for finite sample spaces, random variables and their distributions, the binomial distribution, the Poisson distribution, the normal distribution, problems of estimation, tests of hypotheses, elementary sampling theory, and an introduction to correlation and regression. Prerequisite: Math. 201.

Math. 308. The Teaching of Junior High School Mathematics

Cr: 2 s.hrs.

Most of the content of Math. 300 is covered by this course, but its chief function is to present those techniques and methods of procedure which can be used successfully in the teaching of junior high school mathematics. Recent experimental text materials are examined. Observation and participation in the teaching of certain units in junior high school classes are required.

Math. 310. An Introduction to Mathematics

Cr: 2 s.hrs.

This course is for students whose major interests are in fields other than mathematics and science. Fundamental concepts and applications are stressed rather than formal manipulative techniques. Topics include: logic, the evolution of the number system, the algebra of sets with applications to social science, probability and the theory of games, systems of notation, and mathematical systems. This course may be substituted for Math. 300.

Math. 400. Elements of Statistical Reasoning

Cr: 2 s.hrs.

For a description of this course, see page 57.

Math. 401. The Teaching of Mathematics in Secondary Schools

Cr: 3 s.hrs.

The techniques of teaching different units of work in the secondary school are studied, and the application of these techniques in a demonstration class is observed by the student. Current curricular trends and proposals are examined. Each student participates in

THE CURRICULA

organizing and preparing teaching material; in conducting class activities; in constructing, administering, and evaluating tests; in tutoring, and in other teaching activities.

Math. 402. Applications of Mathematics

Cr: 3 s.hrs.

Emphasis is placed on laboratory experiments, the careful statement of problems, the determination of the information to be collected, and the collection and statistical analysis of data including the testing of conclusions drawn against alternative hypotheses. Students become familiar with basic statistical procedures and the use of measuring and calculating instruments in laboratory experiments on measurement problems including field work in surveying.

Math. 404. Modern Mathematical Literature

Cr: 2 s.hrs.

An important objective of this course is to help the student to integrate the work of his four years as a mathematics major and to relate this work to his chosen profession of teaching secondary school mathematics. Attention is given to the development of important concepts of modern mathematics as well as to proposals for including certain aspects of these in the curricula of the schools. The student is expected to become familiar with recent literature in the field.

Math. 405. History of Mathematics

Cr: 2 s.hrs.

This course surveys the history of elementary mathematics, through calculus, from ancient times to the present. Emphasis is on the major developments in the fields of arithmetic, algebra, and geometry and on contributions of leading mathematicians. The solution of mathematical problems in their historical context is an important part of the course. A by-product is the motivating effect of historical information on the teaching and learning of mathematics.

Math. 406. Solid Analytic Geometry

Cr: 2 s.hrs.

This course includes a study of the basic elements of three-dimensional analytic geometry along with reference to the extensions to n dimensions. Topics are: coordinates and graphs, vectors, planes and lines, applications of determinants and matrices, surfaces and curves, quadric surfaces and their classification, the general equation of the second degree, and coordinate and point transformations.

Math. 407. Advanced Calculus

Cr: 2 s.hrs.

The purposes of this course are twofold: fundamental notions of calculus, such as sequences, limits, differentiation, integration, the Generalized Theorem of the Mean, partial derivatives, multiple integrals, and infinite series are rigorously developed and examined; also, some extensions of these basic concepts are introduced. In this latter set are such topics as: line integrals through Green's Theorem, Fourier series, elliptic integrals, and gamma and beta functions.

Math. 409. Introduction to Contemporary Mathematics Cr: 2 s.hrs.

This course develops the point of view of contemporary mathematics and considers its potential influence upon secondary school mathematics. Consideration is given to topics in professional literature for possible inclusion in secondary school mathematics. Topics include sets, Boolean algebra, a modern concept of variable and function, a detailed study of sentences and statements, the use of symbolism and patterns in mathematics, linear programming, and application of new mathematical techniques in social sciences.

Math. 410. Mathematics of Finance

This course introduces the elementary theory of simple and compound interest and leads to the solution of practical problems in annuities, sinking funds, amortization, depreciation, stocks and bonds, installment buying, and savings and loan associations. It discusses the mathematics of life insurance covering the following: the theory of probability as related to life insurance; the theory and calculation of mortality tables; various types of life annuities and insurance policies and reserves. This course gives a helpful background to the mathematics teacher and aids the student of economics and insurance.

Math. 411. Elements of Mathematical Thought Cr: 2 s.hrs.

This course acquaints students having a limited background in mathematics with the logical structure of mathematics. There is an emphasis on postulational foundations and the reasoning process itself. Topics include: the nature of mathematical knowledge, the origin and influence of logical systems, essentials of logical reasoning, and examples of logical systems from algebra and geometry.

Undergraduate mathematics majors desiring to take this course must secure special permission.

Math. 415. Differential Equations Cr: 2 s.hrs.

Applications of differential equations and their standard methods of solution are treated in this course. Topics are: linear differential equations of the first degree and of the first and higher orders, linear equations of the n th order with constant coefficients, linear equations of the second order, exact and total differential equations, simultaneous equations, numerical approximation, and series solutions.

Math. 432. Analytical Topology Cr: 3 s.hrs.

The aim of this course is to introduce the student to some of the terminology, concepts, and methods of a rich branch of mathematics which has proved to be a fertile area for current research in mathematics. Special emphasis is to be placed on the "topological" structure of the familiar real line (set of real numbers), ordinary Euclidean space, and metric spaces in general. This course is designed to provide a background for both understanding more fully the results of classical analysis (calculus), and for studying "modern" analysis.

THE CURRICULA

Math. 453. Differential Calculus

Cr: 3 s.hrs.

Concepts of differential calculus are developed for science students who have taken one year of college mathematics. Topics include: functional relationships, slope, limit, continuity, graphical representations of science problems, differentiation of algebraic and transcendental functions, geometric and physical application of derivatives, velocity, and acceleration in curvilinear motion. Applications are developed utilizing the scientific background of the students. Students credited with Math. 201 may not take this for credit.

Math. 454. Integral Calculus

Cr: 3 s.hrs.

Concepts of integral calculus are developed for students who have completed Math. 453 or equivalent. Topics include: integration procedures, solid analytic geometry, and geometrical and physical applications of the definite integral in two and three dimensional problems. Applications utilize the scientific background of the students. Students credited with Math. 202 may not take this for credit.

Math. 480. Elements of Logic

Cr: 2 s.hrs.

This course develops an understanding of methods of reasoning used in the mathematical sciences. The point of view and elementary processes of symbolic logic are studied. Background materials are included for teaching of logical concepts in secondary schools.

Math. 495A and B. Honors Seminar in Mathematics Cr: 2 s.hrs. each

These seminars enable outstanding junior and senior mathematics majors to do independent work in areas not included in the regular curriculum. Class meetings are of seminar type, and emphasis is on independent investigations that are conducted by the student in consultation with the instructor. The student prepares written reports, gives oral reports, and is subject to both written and oral examination. Each registration in this course requires approval of the Chairman of the Mathematics Department and of the instructor. The more qualified students, mostly seniors, are invited in advance.

THE DEPARTMENT OF MUSIC

Wilson (*Chairman*), Christmann, Hayton, Horn, Moore, Morse,
Present, Priesing, Wilkes, Zerbe

The Department of Music offers a two-fold program:

1. A major in music education for students who wish to teach music in grades one through twelve.
2. Music courses as cultural background for general students.

THE MUSIC MAJOR

The music major prepares the student to teach vocal or instrumental music, music appreciation, and music theory in the elementary and secondary schools. The curriculum includes four areas of subject-matter; music history and appreciation, music theory, applied music, and music pedagogy. Music majors pursue the same core curriculum throughout the freshman and sophomore years; thereafter, they choose differentiated curricula in instrumental or vocal emphasis. By use of free electives, it is possible to qualify to teach in both areas.

Students who wish to major in music are required to have a preliminary conference with the Chairman of the Department, at which time they will discuss and demonstrate their qualifications for specialization in this field. Prospective music majors should have performance ability of promise on a primary and secondary instrument, good musicality, a knowledge of elementary music theory, and give evidence of serious music study throughout the high school years.

Instrumental primary students are urged to participate in choral organizations in high school; voice primary students are urged to study piano throughout the four years in high school. Two years of a language are required for entrance to the music major.

Applied Music

Music majors choose a primary and a secondary instrument in applied music; one shall be piano. Other primary instruments may be organ, voice, violin, or other band and orchestra instruments. The primary instrument represents the student's greatest talent and accomplishment; the secondary instrument, lesser talent and accomplishment. Every music major will give a graduation recital on his primary instrument in the senior year. Students receive a one-hour private lesson on the primary instrument and a half-hour private lesson (or equivalent class lesson) on the secondary each week.

All music students will study only with the applied music teachers provided by the College.

ENTRANCE REQUIREMENTS IN PRIMARY INSTRUMENTS

PIANO PRIMARY

All Major and Harmonic Minor Scales four octaves, hands to-

THE CURRICULA

gether. I, IV, V triads and Inversions in all Major and Minor Keys.

A Two-Part Invention or Movement from one of the Suites by Bach.

A Sonata by Haydn, Mozart, or Beethoven.

A composition by a Romantic or Modern Composer.

At least one of the three compositions listed above is to be played from memory.

Ability to play at sight a 4-part Bach Chorale, such as "Ach, bleib bei uns, Herr Jesu Christ."

VOICE PRIMARY

Scales and exercises:

Be able to sing Major and Minor scales (one octave) from a given pitch.

Be able to sing arpeggios (one octave) from a given pitch.

Repertory:

Ability to sing with musical feeling, good intonation and clear diction two songs one of which shall be from memory. You are not confined to the suggestions below. You may sing any thing of a more difficult nature from the standard Oratorio, Opera or English, French, German or Italian Art Song Repertory.

Soprano:	Handel, "Where E'er You Walk" from <i>Semele</i> Roy, William "This Little Rose" Brahms, "Wiegenlied" (Lullaby) Mendelssohn, "On Wings of Song" Quilter arr. "Drink To Me Only With Thine Eyes" Haydn, "She Never Told Her Love"
Contralto:	Burliegh arr. "Deep River" Roy, William "This Little Rose" Giordiani, "Caro Mio Ben" Faure, "Après en Reve" Quilter arr. "Drink To Me Only With Thine Eyes" Brahms, "Lullaby"
Tenor:	Barber, "The Daises" Monro, "My Lovely Celia" Purcell, Edward "Passing By" Beethoven, "I Love Thee" Rogers, James H. "The Star" Martin, "Come to the Fair"
Bass-Baritone:	Franz, "Dedication" Beethoven, "In questa tomba" Edwards, "Into the Night" Roy, William "This Little Rose" Quilter arr. "Drink To Me Only With Thine Eyes" Carrissimi, "Vittoria, Vittoria"

Technique:

A pleasing voice evidencing a good tonal placement, control of breath and flexibility. (Previous study preferred, not required).

Reading:

The ability to read with some fluency and an acceptable degree of accuracy simple Folk Tunes and hymns.

VIOLIN PRIMARY**Scales:**

All major and melodic minor scales (two octaves).

Study Materials:

Kayser, Op. 20, Books I and II.

Mazas, Op. 36, Book I.

Repertory:

Accollay, Concerto.

Viotti, Concerto #23.

Old Italian or German Sonata

Equivalent material may also be selected.

Reading:

Ability to read at sight in first through third positions.

CLARINET PRIMARY

- 1) A movement from a standard concerto or sonata, demonstrating the candidate's degree of advancement, e.g., concertos of Mozart, Weber, Spohr; sonatas of Brahms, Stanford, Saint-Saens, etc.
- 2) An etude from one of the standard methods, demonstrating the candidates maximum degree of advancement, e.g., Klose, Baermann, Lazerus, Langenus, Labanchi, Rose, etc.
- 3) Knowledge of all the major and minor scales, demonstrated in performance either without notes, or from the methods of Klose, Baermann, Bender, etc.
- 4) Ability to match tones given on the piano, and to sing simple melodies at sight.
- 5) Ability to read at sight material of the difficulty of the early pages of Behrmann, Clarinet Method, II.

CORNET-TRUMPET PRIMARY**Scales:**

All major and minor scales, two octaves where possible. Ernest Williams Method Part I, II and III.

Any one concert etude or movement from a concerto in part III.

Ability to sightread band and orchestral music of class A and B level.

Entrance requirements for other primary instruments may be obtained upon request to the Director of Admissions.

THE CURRICULA

ENTRANCE REQUIREMENTS IN PIANO, SECONDARY INSTRUMENT

Ability to sightread simple material of the difficulty of Hanna Smith, Sightreading Exercises, Parts I through 4, Schroeder and Gunther.

All major scales, two octaves, hands alone.

I, IV, V triads, in all major keys, all positions, hands alone.

Evidence of satisfactory completion of the Oxford Older Beginner's Book or equivalent material.

Two of the following compositions:

- a. Minuet in G, Bach, Classics Albums, Book I, B. F. Wood Music Co.
- b. Sonata in G, Beethoven, op. cit.
- c. Melody, Schumann, op. cit.

All non-keyboard majors must study piano secondary (and take entrance placement examinations if there has been previous study). It is strongly recommended that the entrance requirements in Secondary Piano be completed while the student is in High School.

These requirements represent one year of serious music study.

Entrance requirements for the other secondary instruments may be obtained upon request.

A student will be admitted with a condition in his secondary instrument provided he has compensatory performance abilities on other instruments. A condition on the secondary instrument, however, must be removed during the first year. A student will not be permitted to enter the sophomore year until the condition has been removed. Instruction on sub-credit secondary instruments will be taken at the student's expense and from approved teachers.

All instruction in applied music taken during the summer session and all instruction required to make up failures in applied music will be taken at the student's expense.

STUDENT TEACHING

Music majors will do four weeks of student teaching in grades one through six in the spring semester of their junior year, and six weeks of student teaching in grades seven through twelve in the fall semester of their senior year. Experience is given in teaching both vocal and instrumental music.

ENTRANCE REQUIREMENTS FOR STUDENT TEACHING

I. For Junior Student Teaching

Regardless of vocal or instrumental emphasis, all music majors are required to complete Mus. 210B, *Secondary Piano*, before junior student teaching and in addition to meet the following minimum performance standards with an average grade of not less than C:

- a. Give evidence of a working knowledge of practical keyboard harmony; ability to harmonize and transpose a simple melody; chord with primary chords in any major or minor key.

- b. Sing and play five folk songs suitable for use in the elementary grades.
- c. Play four community songs, two of which shall be "America" and "Star Spangled Banner" from memory.

II. For Senior Student Teaching

Regardless of vocal or instrumental emphasis, all music majors are required to meet the following minimum requirements in Secondary (piano) with an average of not less than C:

- a. Play an easy selection on any instrument other than the primary or secondary instrument.
- b. Play at sight a song suitable for use in the junior high school.
- c. Play six community songs, three of which shall be "America", "America the Beautiful", and "The Star Spangled Banner". The latter three shall be played from memory.

MUSIC SCHOLARSHIPS

See Scholarships, page 44ff.

ENSEMBLE

All music majors participate in the ensemble of the primary instrument through the four years. Regardless of the primary instrument, all music majors participate in choral organizations during the freshman and sophomore years. Thereafter, they may elect membership in other organizations, except that to fill out necessary sections of the band or orchestra, the Chairman of the department will assign needed instrumentalists to participation in two instrumental ensembles in any semester or year, rather than to the usual participation in one instrumental and one vocal ensemble. Ensemble credit is not given for the freshman year. Thereafter, a maximum of five semester hours may be earned. Students may not participate in three organizations either with or without credit without special permission from the Chairman of the department.

RECITALS

Faculty recitals and Senior Graduation recitals are given in the Recital Hall of the music building and in the Memorial Auditorium. Student recitals are given bimonthly on Friday afternoons. All music students are required to perform in recitals as directed by their applied music teachers and to attend at least two-thirds of the faculty and student recitals.

Music for the General Student

The cultural obligation of the teacher has long been recognized. Teacher education has become increasingly a matter of providing rich cultural backgrounds upon which the teaching of a given subject may be projected. For this reason all students except music majors are required to take Mus. 100, *Music Appreciation*. In addition, the general student may elect courses in music history and literature in the junior and senior years. Whenever possible, the content of these courses is related to the student's major field.

THE CURRICULA

MUSIC MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Physical Ed.</i>		Phys. Ed. 100B <i>Physical Ed.</i>	
<i>Activities</i>	$\frac{1}{2}$	<i>Activities</i>	$\frac{1}{2}$
Soc. St. 100A <i>Dev. of World Civ.</i>	3	Soc. St. 100B <i>Dev. of World Civ.</i>	3
Eng. 100C <i>Fund. of Writing</i>	3	Speech 100D <i>Fund. of Speech</i> ...	3
Ed. 100 <i>Mental Hyg. & Per. Adj.</i>	2	H. Ed. 100 <i>Healthful Living</i>	2
Sci. 100C <i>The Earth Sciences</i> ...	2	Music 102 SIGHT READING	
Music 101 SIGHT READING		& EAR TR.	2
& EAR TR.	2	Music 205B STRING INSTRUMENTS	1
Music 205A STRING INSTRUMENTS	1	Music 104 PRIMARY	
Music 103 PRIMARY		INSTRUMENT, II	1
INSTRUMENT, I	1	Music 105B SECONDARY	
Music 105A SECONDARY		INSTRUMENT, II	$\frac{1}{2}$
INSTRUMENT, I	$\frac{1}{2}$	Music 207 EPOCHS IN	
		MUSICAL DEV.	2
	15		15

SOPHOMORE YEAR

Phys. Ed. 200A <i>Physical Ed.</i>		Phys. Ed. 200B <i>Physical Ed.</i>	
<i>Activities</i>	$\frac{1}{2}$	<i>Activities</i>	$\frac{1}{2}$
Soc. St. 200A <i>Contemp. Am. Life</i>	3	Soc. St. 200B <i>Contemp. Am. Life</i>	3
Ed. 201 <i>Human Dev. & Behavior</i>	3	Ed. 201 <i>Human Dev. & Behavior</i>	3
Music 201 ELEMENTARY		Sci. 100A <i>Physical Science, or</i>	
HARMONY	3	Sci. 100B <i>Biological Science</i> ..	4
Music 209 BRASS INSTRUMENTS	1	Music 202 ADVANCED HARMONY	3
Music 203 PRIMARY		Music 206A WOODWIND	
INSTRUMENT, III	1	INSTRUMENTS	1
Music 210A SECONDARY		Music 204 PRIMARY	
INSTRUMENT, IV	$\frac{1}{2}$	INSTRUMENT, IV	1
Music 208 EPOCHS II	2	Music 210B SECONDARY	
Elective	2	INSTRUMENT, IV	$\frac{1}{2}$
	16		16

JUNIOR YEAR

Ed. 303 <i>Teacher in Sch. & Com.</i>	3	Ed. 304X <i>Prin. & Meth. of Teach.</i>	3
Math. 300 <i>Social Uses of Math.</i>	2	Ed. 403A <i>Student Teaching</i>	
Elective	2	(Junior Practicum)	3
Music 320 TEACHING MUSIC IN		Elective	2
ELEM. SCHOOL	3	Lang. 300 <i>Foundations of Lang.</i>	2
Music 307 FORM & ANALYSIS ...	2	Math. 400 <i>Elem. of Statistical</i>	
Music 206B PERCUSSION		<i>Reasoning</i>	2
INSTRUMENTS	1	Music 304 PRIMARY	
Music 303 PRIMARY		INSTRUMENT, VI	1
INSTRUMENT, V	1	Music 310B SECONDARY	
Music ELEM. CONDUCTING ..	2	INSTRUMENT	$\frac{1}{2}$
Music 310A SECONDARY		Music ENSEMBLES	1
INSTRUMENT	$\frac{1}{2}$	Music SCHOOL BANDS	
Music ENSEMBLES	1	AND ORCH.	1
	17 $\frac{1}{2}$		15 $\frac{1}{2}$

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 4?? <i>Edu. Elective</i>	3
Eng. 100G <i>Western World Lit.</i>	3	F. Arts 100 <i>Intro. to Visual Arts</i>	3
Electives	2	<i>Humanities Elective</i>	2
Ed. 403B <i>Student Teaching</i>		Free Electives	6
(Senior Practicum)	5	Music 402B PRIMARY	
Music 401 METH. OF TEACH.		INSTRUMENT	$\frac{1}{2}$
MUSIC IN SEC. SCHOOL	3	Music ENSEMBLES	1
Music ENSEMBLES	1		
Music 402A PRIMARY INSTRUMENT	$\frac{1}{2}$		
	17 $\frac{1}{2}$		15 $\frac{1}{2}$

All general students complete a music questionnaire. On the evidence of this questionnaire, they are invited to participate in the musical organizations of the College such as the band, choir, orchestra, and opera workshop.

Pipe Organ

The College owns two pipe organs: the great four-manual Moeller Organ in the Memorial Auditorium, and the Clarence O.S. Howe three-manual Austin Organ in Edward Russ Hall. Concerts are given by visiting organists, faculty, and advanced organ students.

Instrument Rental

A charge of \$12.50 a semester will be made for those students who wish to rent College-owned instruments for use in instrumental classes in Mus. 205A, 205B, 206A, and 309. The same charge will be made for rental of instruments during the summer.

DEPARTMENTAL COURSE OFFERINGS

Mus. 100. Music Appreciation **Cr: 2 s.hrs.**

For a description of this course, see page 56.

Mus. 101. Sight Reading and Ear Training **Cr: 2 s.hrs.**

This course aims to develop basic skills in music reading. It includes notation and terminology, major and minor scales, intervals, triads, ear and eye recognition of commonly used tonal and rhythmic groups, and written dictation of a standard repertory of thematic materials. This course meets three hours weekly and is credited on a laboratory basis.

Mus. 102. Advanced Sight Reading and Ear Training **Cr: 2 s.hrs.**

This course is a continuation of MUSIC 101. It includes a study of the more difficult tonal and rhythmic groups, reading parts in various clefs, harmonic ear training, and dictation. The subject-matter is taught through standard song literature, including folk and art song, choral and oratorio. This course meets three hours weekly and is credited on a laboratory basis.

Prerequisite: Mus. 101.

Mus. 103. Primary Instrument, Part I **Cr: 1 s.hr.**

Mus. 104. Primary Instrument, Part II **Cr: 1 s.hr.**

Mus. 105A. Secondary Instrument, Part I **Cr: 1/2 s.hr.**

Mus. 105B. Secondary Instrument, Part II **Cr: 1/2 s.hr.**

Mus. 201. Harmony **Cr: 3 s.hrs.**

This course presents a study of the harmonic procedures found in Baroque and pre-Baroque music. It includes analysis, dictation, and harmonization of chorales. Small forms, phrasing, cadences, triads, and seventh chords in all inversions, as well as non-harmonic tones and modulation are presented. Prerequisite: Mus. 102.

THE CURRICULA

Mus. 202. Advanced Harmony

Cr: 2 s.hrs.

This course is a continuation of MUSIC 201. MUSIC 202 presents a study of altered chords (chromatic harmony) through the analysis, dictation, and harmonization of more difficult chorales. Further work in form, phrasing, and cadences is assigned. Prerequisite: MUS. 201.

Mus. 203. Primary Instrument, Part III

Cr: 1 s.hr.

This course is a continuation of Mus. 104.

Mus. 204. Primary Instrument, Part IV

Cr: 1 s.hr.

Mus. 205A. String Instruments, I

Cr: 1 s.hr.

This course develops elementary playing skills on string instruments. The violin is the basic instrument for this course for all students who have not had previous string experience. The materials and methods used are those recommended in the teaching of these instruments in the classroom. Special attention is given to various problems likely to occur in the organization of beginning string classes in the public school. This course meets two hours weekly and is credited on a laboratory basis. Prerequisite: Mus. 102.

Mus. 205B. String Instruments, II

Cr: 1 s.hr.

This course is a continuation of MUSIC 205A. It aims to develop string playing beyond elementary level and includes the higher positions, bowling techniques, and vibrato. Opportunity is given the student to become familiar with the viola, cello, and double bass. Students learn a repertory of folk song and elementary ensemble pieces suitable for grade school. This course meets two hours weekly and is credited on a laboratory basis. Prerequisite: Mus. 205A.

Mus. 206A. Woodwind Instruments

Cr: 1 s.hr.

This course develops skills on the clarinet, flute, oboe, and other woodwind instruments. The materials and methods used are those recommended in teaching of these instruments in the classroom. Special attention is given to problems likely to occur in the organization of beginning woodwind classes in the public school. This course meets two hours weekly and is credited on a laboratory basis. Prerequisite: Mus. 202.

Mus. 206B. Percussion Instruments

Cr: 1 s.hr.

This course develops elementary skills on the snare drum, bass drum, tympani, cymbals, bells, etc. The materials and methods are those recommended in teaching these instruments in the classroom. Course meets two hours weekly and is credited on a laboratory basis. Prerequisite: Mus. 202.

Mus. 207. Epochs in Musical Development, Part I

Cr: 2 s.hrs.

This course studies Baroque and Classical epochs in musical development. It deals with the beginnings of opera, the rise of the instrumental music, and the growth of choral polyphony in works of Handel, Bach, Mozart, Haydn and culminates in Beethoven.

Mus. 208. Epochs in Musical Development, Part II Cr: 2 s.hrs.

This is a continuation of MUSIC 207, and makes a study of the various phases of romantic music development. It includes the study of the music of Mendelssohn, Schubert, Schumann, Berlioz, Liszt, and culminates in the music of Brahms and Wagner.

Mus. 210A. Secondary Instrument, Part III Cr: 1/2 s.hr.

This is a continuation of Mus. 105B.

Mus. 210B. Secondary Instrument, Part IV Cr: 1/2 s.hr.**Mus. 230A and B. A Capella Choir** Cr: 1/2 s.hr. each**Mus. 231A and B. Orchestra** Cr: 1/2 s.hr. each**Mus. 232A and B. Band** Cr: 1/2 s.hr. each**Mus. 233A and B. Music Workshop** Cr: 1/2 s.hr. each**Mus. 234A and B. Opera Workshop** Cr: 1/2 s.hr. each**Mus. 301. Choral Technique** Cr: 2 s.hrs.

This course aims to develop the voice of the student through the singing of choral material suitable for use in the high school. It includes a study of the principles of tone production, diction, phrasing, and interpretation, illustrations of which are made in graded song materials for various vocal combinations. Special attention is given to testing and classification of voices, balance of parts, rehearsal routine, accompaniment playing, and conducting. Prerequisite: Mus. 202.

Mus. 303. Primary Instrument, Part V Cr: 1 s.hr.

This course is a continuation of Mus. 204.

Mus. 304. Primary Instrument, Part VI Cr: 1 s.hr.**Mus. 305. Orchestration** Cr: 2 s.hrs.

This course makes a study of the range, tuning, transposition, and use of all instruments in the orchestra and band. It includes practical arranging for various combinations of instruments and the completion of a full score for band or orchestra. Special attention is given to the playing and transposition of parts at the keyboard.

This course includes observation in the College Orchestra and the College Band. Prerequisites: Mus. 205A, 205B, and 206A.

Mus. 306A. School Orchestras Cr: 2 s.hrs.

This course deals with the organization of school orchestras; the selection, purchase, and care of instruments; tuning procedures; rehearsal techniques; substitution of instruments; elementary conducting; and evaluation of materials. Students learn a repertory of music suitable for use in school orchestras. This course includes off-campus observation of current practices in school orchestras. Prerequisites: Mus. 205A and 205B.

THE CURRICULA

Mus. 306B. School Bands

Cr: 2 s.hrs.

This course deals with the organization of school bands; the selection, purchase, and care of instruments; rehearsal routine; substitution of instruments; elementary conducting, and marching band. Students learn a repertory of music suitable for use in school bands. It includes observation of current practices in school bands. Prerequisite: Mus. 206A.

Mus. 307. Music Form and Analysis

Cr: 2 s.hrs.

This course provides application of all branches of music, theory, history, and performance in the analysis of vocal and instrumental forms. It includes a study of two and three part song forms, the dance suite, rondo, variation, and sonata. The materials are selected with reference to further use in the teaching of music appreciation in the classroom. Prerequisite: Mus. 202.

Mus. 308. Voice for Instrumentalists

Cr: 1 s.hr.

Conducted as a laboratory class to provide instrumentalists with basic voice training, the course is concerned primarily with the development of the individual voice and includes a study of the principles of tone production, breathing, diction, phrasing, and interpretation. The song material and teaching procedure used in this course are those recommended in the teaching of voice class in the senior high school. This course meets two hours weekly and is credited on a laboratory basis. Prerequisite: Mus. 202.

Mus. 309. Brass Instruments

Cr: 1 s.hr.

This course develops elementary playing skills on trumpet, horn, trombone, and other brass instruments. The materials and procedures used are those recommended in the teaching of these instruments in the classroom. Special attention is given to the various problems likely to occur in the organization of beginning brasswind classes in the public school. This course meets two hours weekly and is credited on a laboratory basis. Prerequisite: Mus. 202.

Mus. 310A. Secondary Instrument, Piano

Cr: 1/2 s.hr.

Mus. 310B. Secondary Instrument, Piano

Cr: 1/2 s.hr.

Mus. 320. Teaching Music in the Elementary School Grades, 1-6

Cr: 3 s.hrs.

This course deals with the principles, materials, and methods used in teaching music in the elementary grades. It includes child voice, remedial aids for non-singers, rhythms, creative expression, discriminating listening, development of music reading, part singing, music dramatics, and the integration of music with other subjects in the curriculum. Attention is given to the beginning choral and instrumental program in the elementary school. Prerequisite: Mus. 202.

Mus. 330A and B. A Capella Choir	Cr: 1/2 s.hr. each
Mus. 331A and B. Orchestra	Cr: 1/2 s.hr. each
Mus. 332A and B. Band	Cr: 1/2 s.hr. each
Mus. 333A and B. Music Workshop	Cr: 1/2 s.hr. each
Mus. 334A and B. Opera Workshop	Cr: 1/2 s.hr. each
Mus. 337. The Opera	Cr: 2 s.hrs.

This course makes a study of representative Italian, French, and German operas. It includes analysis of each opera and illustration of its principal numbers by means of recorded music and the piano.

Mus. 338. The Symphony **Cr: 2 s.hrs.**

This course makes a study of representative symphonies, orchestral suites, overtures and tone poems by classic, romantic, and modern composers. Musical illustrations are given by means of recorded music and the piano.

Mus. 401. The Teaching of Music in Secondary Schools **Cr: 3 s.hrs.**

This course deals with the aims, content, and procedure in the teaching of music in the junior and senior high schools. It includes a study of general and elective music courses, extra-curricular music activities, and music for special programs. Attention is given to the coordination of the choral and instrumental program with music appreciation and music theory. Lesson plans and units of work are prepared for use in the classroom.

This course includes observation and participation in the College High School. Prerequisite: Mus. 320.

Mus. 402A and B. Primary Instrument, Parts VII and VIII and

Senior Recital

Cr: 1/2 s.hr. each

These courses are a continuation of Mus. 304.

Mus. 405. Orchestra Conducting and Score Reading **Cr: 2 s.hrs.**

This course aims to develop skills in orchestra conducting and score reading. It includes a study of the particular type of ear training needed in conducting, the technique of the baton, score reading, and interpretation. A special feature of this course is the presentation of a large number of musical examples taken from standard repertory which contain practically all technical and psychological problems which face the conductor. Practical experience in conducting is given in the College High School Orchestra and the College Orchestra. Prerequisites: Mus. 305 and 306A or equivalent.

Mus. 406. Epochs in Musical Development, Part III **Cr: 2 s.hrs.**

This course is a continuation of MUSIC 208 and makes a study of the late romantic period and the rise of modern music. It includes a study of the music of Richard Strauss, Bruckner, Prokofieff, Mahler,

THE CURRICULA

Debussy, Tschaikowsky, Mussorgsky, Stravinsky, Schoenberg, Bartok, and Hindemith.

This course is professionalized for use in the teaching of music appreciation in the classroom.

Mus. 409. Counterpoint

Cr: 2 s.hrs.

This course presents a study of Baroque instrumental and vocal counterpoint (free counterpoint) as found in the works of Bach, Handel, Corelli, Vivaldi, and others. Contrapuntal dictation and analysis and writing of Invention and Suite movements are required.

Mus. 410. Composition

Cr: 2 s.hrs.

This course aims to develop creative power in the composition of small vocal and instrumental forms. Attention is given to the functional aspects of composition in word setting, writing accompaniments and improvisation. Selected compositions are performed in concert at the close of the course. Prerequisite: Mus. 307.

Mus. 426. Survey of Music Literature

Cr: 2 s.hrs.

This is a survey course in music literature and includes a study of folk song, art song, oratorio, opera, idealized dance forms, instrumental suite, sonata, symphony, and symphonic poem. Abundant use of musical illustration, directed listening, and music making acquaint the student with great masterpieces of music which should be the possession of every generally cultured person. This course is designed for the general student. Attention is given to the relation of music to English literature and social studies.

Mus. 429. A Capella Choir and Choral Conducting

This course deals with the theory and practice of the *a cappella choir*. It includes the principles of group tone production, phonetics as related to singing, tuning, posture, techniques of choral conducting, interpretation, and score reading. A feature of this course is the study of a selected list of choral literature suitable for use in school, church, and community. Outstanding students are given an opportunity to conduct the College *A Cappella Choir*. Prerequisite: Mus. 301.

Mus. 430A. A Capella Choir

Cr: 1/2 s.hr.

Mus. 431A. Orchestra

Cr: 1/2 s.hr.

Mus. 432A. Band

Cr: 1/2 s.hr.

Mus. 433A. Music Workshop

Cr: 1/2 s.hr.

Mus. 434A. Opera Workshop

Cr: 1/2 s.hr.

Mus. 490. Survey of Choral Materials for Use in Public Schools

Cr: 2 s.hrs.

This course provides a survey of the choral repertoire for accompanied and a cappella groups, for changed, unchanged, changing, and

mixed voices. Criteria for evaluating available materials, program building for all school needs, including holidays, festivals, radio and television performances, are part of the course. The members of the class comprise a laboratory chorus for the study of the repertoire. The course also includes historical and stylistic characteristics of the choral repertoire. Materials for small groups as well as the large are studied. Prerequisites: Mus. 301 and 429 or their equivalents.

Mus. 499A. Problems in the Teaching of School Music Cr: 2 s.hrs.

This is a post-student teaching course. It aims to (1) evaluate student-teaching experiences; (2) give an opportunity to the student to share with his classmates the problems encountered in student teaching and to seek a possible solution for the same; (3) meet shortages in teacher preparation not provided for in previous courses; (4) give the student a unified view of school-music education before he enters the teaching field. The content of this course is determined largely by the needs of the students.

Mus. 499B. Workshop in School Music Cr: 2 s.hrs.

Designed primarily for music teachers-in-service who wish to work out projects for use in their respective schools, the content of this course is determined by needs in the field. It may include folk-song dramatizations, small vocal and instrumental ensembles, the integration of music with other subjects in the curriculum, music for boys, visual aids in music pageants, festivals, and materials for special programs. This course provides the teacher with a number of units of work suitable for classroom use.

PANZER SCHOOL OF PHYSICAL EDUCATION AND HYGIENE

Tews (*Director*). Coder, DeRosa, Dioguardi, Edwards, Ferris,
Foster, Jensen, Redd, Schmidt, Schumacher, Shiposh, Sommer,
Venezia, Wacker, Watkins

Panzer College of Physical Education and Hygiene was founded in 1917 following the passage of The Pierson Act making physical education compulsory in the schools of New Jersey. Founded in Newark by Mathias Macherey and Randall D. Warden, the school was designed to train teachers of physical education and hygiene and was known as The Newark Normal School of Physical Education and Hygiene. In 1928 the school moved to East Orange and the name was changed to Panzer College of Physical Education and Hygiene, in honor of Mr. Henry Panzer, who was president of the college from 1919 until his death in 1932. In 1932 Dr. Margaret C. Brown was appointed president and served until 1958.

At the start, the school offered a 2-year and then a 3-year course. In 1928, a four-year course leading to the Bachelor of Physical Education was authorized by the State Board of Education. In 1939 the degree was changed to Bachelor of Science in Education.

In 1958, when Panzer realized the need for increasing the number of physical education teachers but could not expand its facilities, the Board of Trustees of the College requested that the Panzer program be incorporated with Montclair State College. The State Board of Education deemed the request "in the best interests of the educational program of the State", and on February 5, adopted a resolution stipulating that, effective August 1, 1958, Panzer College be consolidated with Montclair State College.

As a result of the merger, Panzer College became the Panzer School of Physical Education and Hygiene at Montclair State College. The Panzer library, laboratory, and academic equipment were moved to the Montclair campus.

Objectives

In addition to the general objectives and standards of the College which appear on page 25 of this bulletin and apply fully to all students, the specific objectives of the Panzer School are as follows:

1. To provide a diversified program of high professional quality which will enable the student to develop those traits, qualities, and characteristics which will help him to function effectively as an individual, as a teacher, and as a member of his community.
2. To supply leadership in programs of recreation and physical education for schools, camps, playgrounds, recreation centers and other agencies.

3. To provide a well-rounded service program for all students. Emphasis is placed on developing an understanding of physical education, developing skills for use in future leisure hours, and presenting those activities which provide immediate conditioning and recreational benefits.

4. To offer for all students opportunities for participation in well-directed intramural and intercollegiate competition and in sports and dance clubs.

Admission Requirements

Admission to The Panzer School follows the same pattern as that set forth for all students entering Montclair State College. There is, however, the additional provision that each student who is accepted in this specialized area must pass a battery of physical education tests. These tests are administered by the faculty and are designed to measure coordination, rhythm, and general motor ability.

Though there are no specific high school courses or activities beyond those required for general admission to the College, Panzer School applicants are advised to include chemistry and biology in their high-school program. Broad participation in varsity sports, intramurals and other extracurricular activities is recommended. Camping experience and participation in various recreational activities are also desirable.

Gymnasium Costumes

The wearing of proper gymnasium attire is considered important, and a regulation costume is prescribed for each activity.

The costumes for major students include items necessary to participate in a variety of activities and are ordered by each individual. Itemized lists on order blanks are provided to have the order filled for the opening of college. The approximate cost is \$50.00 for men and \$60.00 for women. These generally last four years.

The costume required in physical education activities classes for the general student is purchased at the Student Supply Store on campus. The cost is approximately \$15.00 and includes a textbook and regulation lock. Under normal circumstances these items will last for two years.

Club and Team Requirement

Opportunities for participation in varsity sports, sports clubs, dance clubs, and intramural activities are available to all students.

Students majoring in physical education are required to participate in a number of these activities to develop proficiency and learn more about them than is possible in the regular offerings.

THE CURRICULA

Camping Requirement

Each student majoring in physical education is required to attend a camp session conducted at the New Jersey State School of Conservation at Lake Wapalanne in Stokes State Forest. Students attend for twelve days in June of the freshman summer and again in June of the sophomore summer.

Skills and techniques in camp programming and leadership are studied and practiced, and the program of aquatic activities can lead to Red Cross certification in swimming and life saving. Camp craft, arts and crafts, boating and canoeing, and outpost camping are among the other activities included in the program.

College Athletics and Men's Intramurals

The College provides athletic fields, three gymnasias, an indoor archery and golf range, and other facilities for promoting sports and recreational activities. The principal sports for men include varsity teams in football, basketball, baseball, soccer, wrestling, track, tennis, golf and bowling. The College is affiliated with the National Association for Intercollegiate Athletics, and the National Collegiate Athletic Association. There are junior varsity teams in football, soccer, basketball, and baseball.

Additional sports activities are available for all male students in the Men's Intramural program. Leagues are organized in basketball and softball, and tournaments are scheduled in other sports.

The program of athletics is governed by a student-faculty council. Funds are provided by the Student Government Association from student activity fees.

Women's Recreation Association

The sport and athletic activities for women are under the direction of the Women's Recreation Association. This active student organization sponsors programs in basketball, volleyball, field hockey, softball, archery, tennis, badminton, and fencing. Membership in these activities is open to all the women students of the college. In addition, W.R.A. sponsors a variety of experiences in intramural competition, sports days, dorm playdays, and invitation games with other colleges. Cheerleaders and twirlers are selected on a competitive basis early in the fall of the year.

Health and Physical Education Major

Satisfactory completion of the approved course of study leads to certification to teach health and physical education in elementary and secondary schools.

PHYSICAL EDUCATION AND HYGIENE

PROGRAM OF COURSES FOR MEN

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Soc. St. 100A <i>Dev. of World Civ., I</i> . . .	3	Soc. St. 100B <i>Dev. of World Civ., II</i> . . .	3
Mus. 100 <i>Music Appreciation</i> . . .	2	F.A. 100 <i>Intro. to the Visual Arts</i> . . .	3
Ed. 100 <i>Mental Hygiene & Pers. Adj.</i> . . .	2	Speech 100D <i>Fund. of Speech</i> . . .	3
Eng. 100C <i>Fund. of Writing</i> . . .	3	H. Ed. 100 <i>Healthful Living</i> . . .	2
Chem. 105 <i>Chem. for Phys. Ed., I</i> . . .	3	Chem. 106 <i>Chem. for Phys. Ed., II</i> . . .	3
P.E.M. 100C <i>ATHLETIC GAMES & SPORTS, I</i> . . .	1	P.E.M. 100D <i>ATHLETIC GAMES & SPORTS, II</i> . . .	1
P.E.M. 100E <i>FUNDAMENTALS OF GYMNASTICS, I</i> . . .	1	P.E.M. 100F <i>FUNDAMENTALS OF GYMNASTICS, II</i> . . .	1
P.E. 100G <i>FOLK, SQUARE & SOCIAL DANCE, I</i> . . .	1	P.E. 100H <i>FOLK, SQUARE & SOCIAL DANCE, II</i> . . .	1
P.E. 102 <i>GRADED GROUP GAMES</i> . . .	1		
	<hr/> 17		<hr/> 17

P.E. 230 CAMPING AND OUTDOOR EDUCATION, I-1

SOPHOMORE YEAR

Soc. St. 200A <i>Contemp. Am. Life, I</i> . . .	3	Soc. St. 200B <i>Contemp. Amer. Life, II</i> . . .	3
Ed. 201 <i>Human Dev. & Behav., I</i> . . .	3	Ed. 202 <i>Human Dev. & Behav., II</i> . . .	3
Sci. 100C <i>The Earth Sciences</i> . . .	2	P.E. 204 <i>KINESIOLOGY</i> . . .	2
Biol. 212 <i>MAMMALIAN ANATOMY FOR PHYS. ED.</i> . . .	3	Biol. 214 <i>PHYSIOLOGY FOR PHYS. ED.</i> . . .	3
P.E.M. 200C <i>ATHLETIC GAMES & SPORTS, III</i> . . .	1	P.E.M. 200D <i>ATHLETIC GAMES & SPORTS, IV</i> . . .	1
P.E. 203A <i>IND. & DUAL SPORTS, I</i> . . .	1	Electives . . .	3
Electives . . .	4		<hr/> 15
	<hr/> 17		

P.E. 330 CAMPING AND OUTDOOR EDUCATION, II-1

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i> . . .	3	Ed. 304X <i>Principles & Methods of Tchg.</i> . . .	3
Math. 300 <i>Social Uses of Math.</i> . . .	2	Eng. 100G <i>Western World Lit.</i> . . .	3
*P.E. 202 <i>HISTORY & PRINCIPLES OF PHYS. ED.</i> . . .	3	Math. 400 <i>Educational Statistics</i> . . .	2
P.E.M. 309 <i>COACHING AND OFFICIATING, I</i> . . .	1	P.E.M. 310 <i>COACHING AND OFFICIATING, II</i> . . .	1
*P.E. 201 <i>PHYSIOLOGY OF EXERCISE</i> . . .	2	*P.E. 301 <i>ADAPTED PHYS. ED.</i> . . .	2
P.E. 101 <i>ACTIVITIES & METHODS FOR ELEMENTARY GRADES</i> . . .	3	P.E. 203B <i>INDIVIDUAL & DUAL SPORTS, II</i> . . .	1
	<hr/> 14	Elective— <i>Humanities</i> . . .	2
		*Lang. 300 <i>Found. of Lang.</i> . . .	2
			<hr/> 16

*1/2 class takes this the first semester and 1/2 class second semester.

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> . . .	3	Ed. 403 <i>Student Teaching</i> . . .	8
P.E.M. 203C <i>INDIVIDUAL AND DUAL SPORTS, III</i> . . .	1	Ed. 4?? <i>Edu. Elective</i> . . .	3
P.E. 405 <i>METH. & MATERIALS OF PHYS. ED. IN SEC. SCHOOLS</i> . . .	4	H.Ed. M101 <i>FIRST AID</i> . . .	2
P.E. 409 <i>ORG. & ADM. OF PHYS. ED.</i> . . .	2	Elective . . .	2
H.Ed. 401 <i>METH. & MATERIALS IN HEALTH ED. AND SAFETY</i> . . .	2		<hr/> 15
Electives . . .	3		
	<hr/> 15		

Total: 128 semester-hours

THE CURRICULA

PROGRAM OF COURSES FOR WOMEN

FRESHMAN YEAR

<i>Fall Semester</i>		S.H.	<i>Spring Semester</i>		S.H.
Soc. St. 100A <i>Dev. of World Civ.</i> , I	3		Soc. St. 100B <i>Dev. of World Civ.</i> , II	3	
Mus. 100 <i>Music Appreciation</i> . . .	2		F.A. 100 <i>Intro. to the Visual Arts</i>	3	
Ed. 100 <i>Men. Hyg. & Per. Adj.</i> . . .	2		Speech 100D <i>Fund. of Speech</i> . . .	3	
Eng. 100C <i>Fund. of Writing</i> . . .	3		H.Ed. 100 <i>Healthful Living</i> . . .	2	
Chem. 105 <i>Chem. for Phys. Ed.</i> , I	3		Chem. 106 <i>Chem. for Phys. Ed.</i> , II	3	
P.E.W. 100C <i>ATHLETIC GAMES</i>			P.E.W. 100D <i>ATHLETIC GAMES</i>		
& SPORTS, I	1		& SPORTS, II	1	
P.E.W. 100E <i>FUNDAMENTALS OF</i>			P.E.W. 100F <i>FUNDAMENTALS OF</i>		
<i>GYMNASTICS</i> , I	1		<i>GYMNASTICS</i> , II	1	
P.E. 100G <i>FOLK, SQUARE &</i>			P.E. 100H <i>FOLK, SQUARE &</i>		
<i>SOCIAL DANCE</i> , I	1		<i>SOCIAL DANCE</i> , II	1	
P.E. 102 <i>GRADED GROUP GAMES</i> . .	1				
	17			17	

P.E. 230 CAMPING AND OUTDOOR EDUCATION, I-1

SOPHOMORE YEAR

Soc. St. 200A <i>Contemp. Am. Life</i> , I	3	Soc. St. 200B <i>Contemp. Amer. Life</i> , II	3
Ed. 201 <i>Human Dev. & Behavior</i> , I	3	Ed. 202 <i>Human Dev. & Behav.</i> , II	3
Biol. 212 <i>MAMMALIAN ANATOMY FOR PHYS. ED.</i>	3	Biol. 214 <i>PHYSIOLOGY FOR PHYS. ED.</i>	3
P.E.W. 200C <i>ATHLETIC GAMES & SPORTS</i> , III	1	P.E.W. 200D <i>ATHLETIC GAMES & SPORTS</i> , IV	1
P.E.W. 200G <i>MODERN DANCE</i> , I . .	1	P.E.W. 200H <i>MODERN DANCE</i> , II	1
P.E.W. 203A <i>INDIVIDUAL & DUAL SPORTS</i> , I	1	P.E. 204 <i>KINESIOLOGY</i>	2
Electives	4	Electives	3
	16		16

P.E. 330 CAMPING AND OUTDOOR EDUCATION, II-1

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304X <i>Principles & Methods of Tchg.</i>	3
Math. 300 <i>Social Uses of Math.</i> . .	2	Eng. 100G <i>Western World Lit.</i> . .	3
Lang. 300 <i>Found. of Language</i> . .	2	Math. 400 <i>Educational Statistics</i> . .	2
*P.E. 202 <i>HISTORY & PRINCIPLES OF PHYS. ED.</i>	3	*Sci. 100C <i>The Earth Sciences</i> . .	2
P.E.W. 311 <i>COACHING & OFFICIATING</i> , I	½	P.E.W. 312 <i>COACHING & OFFICIATING</i> , II	½
*P.E. 201 <i>PHYSIOLOGY OF EXERCISE</i>	2	*P.E. 301 <i>ADAPTED PHYSICAL EDUCATION</i>	2
P.E. 101 <i>ACTIVITIES & METHODS FOR ELEMENTARY GRADES</i>	3	P.E.W. 203B <i>INDIVIDUAL & DUAL SPORTS</i> , II	1
	15½	Elective— <i>Humanities</i>	2
			15½

*½ class takes this first semester and ½ class second semester.

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> . . .	3	Ed. 403 <i>Student Teaching</i>	8
H. Ed. 401 <i>METHODS & MATERIALS IN HEALTH ED. AND SAFETY</i> . .	2	Ed. 4?? <i>Edu. Elective</i>	3
P.E. 405 <i>METHODS & MATERIALS OF PHYS. ED. IN SEC. SCHOOLS</i> . .	4	H. Ed. W101 <i>First Aid</i>	2
P.E. 409 <i>ORG. & ADM. OF PHYSICAL ED.</i>	2	Elective	2
Electives	3		15
	14		

Total: 128 semester-hours

DEPARTMENTAL COURSE OFFERINGS

Health Education

Health Ed. 100. Healthful Living

Cr: 2 s.hrs.

For a description of this course, see page 57.

Health Ed. W101. First Aid

Cr: 2 s.hrs.

This is a lecture and practice course designed to acquaint the student with first-aid procedures and the prevention and care of accidents or sudden illnesses which may occur on the field or in the gymnasium. Theory and practice in simple massage are also included. The appropriate Red Cross First Aid certificate is awarded upon satisfactory completion of the required material.

Health Ed. M101. First Aid

Cr: 2 s.hrs.

This is a first aid course designed for men.

Health Ed. 207. Safety Education

Cr: 2 s.hrs.

Opportunities are presented for acquiring knowledge and skills related to safety in the school buildings, on the school grounds, and going to and from school.

This course is an elective available to all students of the College.

Health Ed. 401. Methods and Materials in Health and

Safety Education

Cr: 2 s.hrs.

This course considers teaching techniques which are most effective in the areas of health and safety. A survey and study of various health materials, textbooks, audio-visual aids, and other materials are also undertaken.

Health Ed. 407. Prevention and Care of Athletic Injuries

Cr: 2 s.hrs.

This is a lecture and laboratory course designed to acquaint the student with ways to prevent and care for the common injuries sustained in athletics. Attention is given to sprains, strains, bruises, burns, and fractures. The responsibility of the coach is emphasized in caring for injuries. This course is a recommended elective for men physical education majors. Prerequisite: HEALTH ED. M101.

Health Ed. 408. Driver Education

Cr: 3 s.hrs.

Part I

This part consists of a minimum of 40 hours of class recitations and discussions for which home reading and study have been assigned. The following topics are included: (1) history and development of driver education and training programs; (2) objectives of driver education; (3) local, state, and national traffic safety programs; (4) driver qualifications; (5) psychophysical testing; (6) curricular content of courses in driver education and training; (7) construction, operation, and maintenance of automobiles; (8) traffic laws and driver licensing; (9) traffic engineering; (10) pedestrian education and protection; (11) equipment for teaching driver education; (12)

THE CURRICULA

liability, costs, and insurance; (13) driver education as a part of the program of the high school; (14) public relations; (15) records and reports; and (16) visual aids in teaching driver education.

Part II

This part consists of a minimum of 20 hours devoted to the following: (1) behind-the-wheel instruction; (2) demonstrations and student-teacher practice in the car; and (3) road tests in traffic. Home reading and study are required in preparation for these projects. Prerequisite: Driver's license with three years of driving experience with satisfactory driving record.

Health Ed. 411. School Health Services

Cr: 2 s.hrs.

The student is familiarized with the health services in the school. The part the teacher plays in coordinating activities with the medical staff is emphasized. Prerequisite: HEALTH ED. 100.

Health Ed. 412. Alcohol Education Workshop

Cr: 2 s.hrs.

This is a workshop course offered with the cooperation of the State Department of Health and aimed at preparing teachers and other school personnel for more understanding service in this special area of education. The workshop covers the physiological, sociological, and psychological problems involved in the use of beverage alcohol and on the materials, sources, and techniques found to be most useful in alcohol-education programs.

Health Ed. 415. Community Hygiene

Cr: 2 s.hrs.

A study of the health needs of a community in relation to water supply, air purification, sewage and garbage disposal, food standards, housing, disease and pest control, and other related areas. Health problems are considered in the light of public health services and attention given to protective as well as corrective measures. The course is conducted through field trips, surveys, lectures and the use of audio-visual aids. Prerequisite: HEALTH ED. 100.

Physical Education

Phys. Ed. 100A and B. Physical Education Activities

Cr: 1/2 s.hr. each

The work of the freshman year consists of an orientation program whereby the students are provided with an opportunity to become acquainted with a variety of team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Phys. Ed. M100C and D. Athletic Games and Sports,

I and II

Cr: 1 s.hr. each

This is an introduction to the history, theory, skills, techniques, and achievement tests in soccer, track and field, basketball, volleyball, football, and softball for men.

PHYSICAL EDUCATION AND HYGIENE

Phys. Ed. W100C and D. Athletic Games and Sports,

I and II

Cr: 1 s.hr. each

A course for women in skills and techniques of field hockey, soccer, basketball, volleyball, softball, and track and field. Rules and some officiating techniques are considered. Leadership traits, proper attitudes, and professional ideals are developed along with an appreciation of skill in these sports.

Phys. Ed. 100E and F. Fundamentals of Gymnastics,

I and II

Cr: 1 s.hr. each

Various forms of gymnastics are taught, including free-standing calisthenics, heavy apparatus, and tumbling. Activities are considered in terms of proper sequence and grading for use in the school program. Safety and teaching techniques are also considered.

Phys. Ed. 100G and H. Folk, Square and Social Dance,

I and II

Cr: 1 s.hr. each

The prospective teacher learns the basic skills, teaching methods, and materials necessary to organize and teach these forms of dance. Standards for social conduct are discussed and experiences provided to employ the social techniques.

Phys. Ed. 101. Activities and Methods for the Elementary

Grades

Cr: 3 s.hrs.

This course covers materials and methods of teaching for the elementary school. Activities include story plays, mimetics, rhythmic activities, gymnastics with hand apparatus, tumbling stunts, marching, and creative activities. A study is also made of the characteristics of the elementary school child in relation to his physical education needs, the organization of physical education activities into teaching units and plans, and a review of courses of study and curricula for the various age groups. Prerequisite: PHYS. ED. 102.

Phys. Ed. 102. Graded Group Games

Cr: 1 s.hr.

Elementary games, team games of low organization, individual and group games are taught. The relationship among children's capacities, needs, and class organization, are considered.

Phys. Ed. 200A and B. Physical Education Activities

Cr: 1/2 s.hr. each

The work of the sophomore year permits the student to select within a given pattern team, dual, and individual sports. Special classes in remedial physical education, dancing, and swimming are also offered.

Phys. Ed. M200C and D. Athletic Games and Sports,

III and IV

Cr: 1 s.hr. each

These courses deal with the teaching methods, theory, skill testing, and conditioning procedures for soccer, basketball, football, and

THE CURRICULA

baseball for men. Prerequisites: PHYS. ED. M100C and D.

Phys. Ed. W200C and D. Athletic Games and Sports,

III and IV

Cr: 1 s.hr. each

Students are provided opportunities for further skill development and participation in sports for women. Planned teaching experiences are included in basketball, volleyball, softball, track and field, and other appropriate activities. Skills and techniques in coaching, officiating, and administration of skill tests are also developed. Prerequisites: PHYS. ED. W100C and D.

Phys. Ed. W200G and H. Fundamentals of Modern Dance,

I and II

Cr: 1 s.hr. each

An introduction to the techniques and composition of modern dance is provided. Attention is given to developmental exercises, the relationship of movement and sound patterns, and group improvisation as a means of approaching dance composition.

Phys. Ed. 201. Physiology and Exercise

Cr: 2 s.hrs.

This course deals with the physiological effects of activity upon the human organism; the reaction of exercises of speed, strength, and endurance upon the circulatory, respiratory, and muscular systems; and the causes of fatigue, staleness, and exhaustion. Prerequisites: BIOL. 212 and BIOL. 214.

Phys. Ed. 202. History and Principles of Physical Education

Cr: 3 s.hrs.

The history and development of physical education are traced from primitive to modern times. Influences which contributed to the modern philosophy of physical education are identified.

Principles of physical education are studied in the light of scientific foundations, aims and objectives, and the place of physical education in the total educational program. The problems of social and moral training, wise use of leisure time, and total fitness are also considered. This course may not be taken until the junior year.

Phys. Ed. 203A, B, and C. Individual and Dual Sports

Cr: 1 s.hr. each

Parts A and B are coeducational while part C is for men only. The history, rules, skills, and teaching techniques and progression are presented in the following sports: archery, badminton, bowling, fencing, golf, tennis, and wrestling (for men).

Phys. Ed. 204. Kinesiology

Cr: 2 s.hrs.

A study of human movement and its relationship to anatomical structure is undertaken. The course includes the principles of mechanics of underlying motor skills, and the application of these factors to the physical education activities. Prerequisite: BIOL. 212.

Phys. Ed. 230. Camping and Outdoor Education **Cr: 1 s.hr.**

Fundamental skills in boating, canoeing, conservation, and out-post camping are taught. Students have the opportunity of earning American Red Cross swimming certificates from the beginner's level to that of Instructors in Water Safety. The theory and philosophy of camping are presented in class as well as in the general conduct of the camp session.

Phys. Ed. 301. Adapted Physical Education **Cr: 2 s.hrs.**

This is a lecture and participation course covering the philosophy and goals of adapted physical education for meeting the needs of children with handicaps in terms of body mechanics; body conditioning; posture programs; physical examinations; and exercises for defects. Each student is required to spend a minimum of 30 hours of clinical experience in schools, clinics, or hospitals. Prerequisite: PHYS. ED. 204.

**Phys. Ed. M309 and M310. Coaching and Officiating,
I and II** **Cr: 1 s.hr. each**

The offensive and defensive strategy of the various varsity sports is studied. A knowledge of the rules and techniques of officiating is required, and opportunities are provided for their application. Prerequisites: PHYS. ED. M100C and D and PHYS. ED. M200C and D.

**Phys. Ed. W311 and W 312. Coaching and Officiating,
I and II** **Cr: 1/2 s.hr. each**

The fundamentals and rules of the various seasonal sports are reviewed. Emphasis is placed on the understanding of the rules, the management of games and practices, the development of officials, the adaptation of athletic activities for women and girls, and methods of teaching. Intramural games and play days supplement the course. The course covers field hockey, soccer and speedball, basketball, volleyball, softball, and track and field events. Prerequisites: PHYS. ED. W100C and D and PHYS. ED. W200C and D.

Phys. Ed. 330. Advanced Camping and Outdoor Education **Cr: 1 s.hr.**

Second year students are given advanced work in all the camping skills covered in the first year. In addition, they are given opportunities to plan programs and to have leadership assignments followed with evaluation sessions. Prerequisite: PHYS. ED. 230.

**Phys. Ed. 405. Methods and Materials of Physical Education
in the Secondary Schools** **Cr: 4 s.hrs.**

Analysis of the program of physical education in the secondary school; criteria for the selection and grade placement of activity; consideration of method and teaching techniques; construction of teaching units and lesson plans; and problems relating to program

THE CURRICULA

planning time allotment, facilities, sources of materials, and measurement and evaluation in physical education constitute the content of this course. This course may not be taken until all junior-level work has been completed.

Phys. Ed. 409. Organization and Administration of Physical Education

Cr: 2 s.hrs.

The details of organizing the various aspects of the physical education program are discussed. Legislation, financing, excuses, plant facilities, care and purchase of supplies and equipment, office management and records, intramural programming and tournaments, and conduct of the varsity sports program are among the topics considered. This course may not be taken until all junior-level work has been completed.

Phys. Ed. 411. Organization and Administration of Athletics

Cr: 2 s.hrs.

The purpose of the course is to offer practical suggestions and aids for the managing of affairs of an athletic program to those who expect to become teachers, supervisors, and directors of physical education. The items discussed include athletic eligibility, management, equipment, awards, finances, budgets, safety, maintenance, planning of facilities, junior and senior high school athletics, and current athletic trends.

Phys. Ed. 412. Organization and Administration of Recreation

Cr: 2 s.hrs.

This course is designed to develop an understanding of the philosophy, scope, and values of recreation in our contemporary life. Program planning, suitable activities for various age levels, and publicity and promotion are discussed.

Phys. Ed. 413. Social Recreation

Cr: 2 s.hrs.

This course is designed to give the student materials and techniques for handling small and large groups of people in a social situation. The needs of children, teen agers, young adults, and senior citizens are considered. Materials in ice-breakers and mixers, seasonal events, active and quiet parties, skits, and dances are presented. Correct social conduct is covered and high standards of deportment set for the various activities.

Phys. Ed. 414. Nature and Function of Play

Cr: 2 s.hrs.

The psychological and sociological implications of play are studied and related to the growth and development of children and young people. The effect of play on society through the ages, as well as the attitudes of society toward play, are studied to evaluate play in relation to juvenile delinquency, worthy use of leisure time, and other social and psychological problems. Prerequisite: ED. 201.

THE DEPARTMENT OF SCIENCE

Allen (*Chairman*), Becker, Daniels, Filas, Fink, Fisher, Flynn, Garik, Gawley, Hodson, Koditschek, Kowalski, Kuhnen, McDowell, Minor, Muschio, Placek, Rossmoore, Silver, Smith

The significant role of science in our culture and its increasing importance are reflected in the curricula for the preparation of science teachers at Montclair. The science faculty is committed to the idea that each teacher education curriculum should be such as to assure adequate background for the position to be filled. In this connection, new secondary school curricula are continually studied and evaluated by the science faculty. The newer approaches are reflected in the courses offered at Montclair State.

Investigations by the department point out that full-time teaching positions in a single subject are seldom open to the first-year teacher. Most beginners teach two or more science subjects and often a non-science subject in their instructional load. The student program, therefore, assumes a major and a minor in the sciences. If a student majors in the biological sciences, he minors in the physical sciences, and vice versa. This allows a broad base in the sciences and is in consonance with current recommendations by national study groups on the preparation of secondary school science teachers. With this base, and the elective program, the student may specialize in one or more areas of science. With this specialization the student is prepared to enter a master's degree program and to continue his education in the sciences.

The Department of Science is a comprehensive department which includes divisions of biology, chemistry, and physics. It includes a program in College High School, as well as one in general education and service courses for other departments.

THE CURRICULA

SCIENCE MAJOR—BIOLOGICAL SCIENCE SPECIALIZATION

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>		Phys. Ed. 100B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 100A <i>Development of</i>		Soc. St. 100B <i>Development of</i>	
<i>World Civilization</i>	3	<i>World Civilization</i>	3
Speech 100D <i>Fundamentals of</i>		Eng. 100C <i>Fundamentals of</i>	
<i>Speech</i>	3	<i>Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Ed. 100 <i>Mental Hygiene &</i>	
*Math. 103 <i>Mathematical</i>		<i>Personal Adjustment</i>	2
<i>Analysis, I</i>	3	*Math. 104 <i>Mathematical</i>	
Biol. 101 <i>GENERAL BOTANY, I</i> ...	4	<i>Analysis, II</i>	3
		Biol. 102 <i>GENERAL BOTANY, II</i> ..	4
	16½		15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>		Phys. Ed. 200B <i>Phys. Ed.</i>	
<i>Activities</i>	½	<i>Activities</i>	½
Soc. St. 200A <i>Contemporary</i>		Soc. St. 200B <i>Contemporary</i>	
<i>American Life</i>	3	<i>American Life</i>	3
Ed. 201 <i>Human Dev. &</i>		Ed. 202 <i>Human Dev. &</i>	
<i>Behavior, I</i>	3	<i>Behavior, II</i>	3
H. Ed. 100 <i>Healthful Living</i> ...	2	Sci. 100C <i>The Earth Sciences</i> ...	2
Biol. 201 <i>GENERAL ZOOLOGY, I</i> ...	4	Biol. 202 <i>GENERAL ZOOLOGY, II</i> ..	4
Chem. 101 <i>GENERAL COLLEGE</i>		Chem. 102 <i>GENERAL COLLEGE</i>	
<i>CHEMISTRY, I</i>	4	<i>CHEMISTRY, II</i>	4
	16½		16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School &</i>		Ed. 304 <i>Prins. & Tchrs. of Sec. Ed.</i>	3
<i>Community</i>	3	Lang. 300 <i>Found. of Language</i> ..	2
Mus. 100 <i>Music Appreciation</i> ...	2	Electives	4
**Electives	4	Chem. 406 <i>ORGANIC CHEMISTRY,</i>	
Chem. 405 <i>ORGANIC CHEMISTRY, I</i>	4	<i>II (or 4)</i>	3
Phys. 101 <i>GENERAL COLLEGE</i>		Phys. 102 <i>GENERAL COLLEGE</i>	
<i>PHYSICS, I</i>	4	<i>PHYSICS, II</i>	4
	17		16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Eng. 100G <i>Western World Lit.</i> ...	3	Ed. 4?? <i>Edu. Elective</i>	3
Elective	2	Elective— <i>Humanities</i>	2
Sci. 401 <i>TEACHING OF SCIENCE</i>		Elective	2
<i>IN SECONDARY SCHOOL</i>	3		15
Phys. 402 <i>MAGNETISM AND</i>			
<i>ELECTRICITY</i>	4		
	15		

Total: 128 semester-hours

*While the program allows only the basic mathematics needed by most science teachers, MATH. 103 and 104 does allow preparation for further study. It is recommended that majors elect MATH. 453 and 454 for a more adequate preparation in this area.

**Suggested electives to complete a program for biological specialization include: BIOL. 402 (Mammalian Anatomy and Histology), BIOL. 409 (Human Physiology), BIOL. 411 (Bacteriology), and BIOL. 412 (Genetics).

SCIENCE MAJOR—PHYSICAL SCIENCE SPECIALIZATION

FRESHMAN YEAR

<i>Fall Semester</i>	S.H.	<i>Spring Semester</i>	S.H.
Phys. Ed. 100A <i>Phys. Ed. Activities</i> ½		Phys. Ed. 100B <i>Phys. Ed. Activities</i> ½	
Soc. St. 100A <i>Development of World Civilization</i>	3	Soc. St. 100B <i>Development of World Civilization</i>	3
Speech 100D <i>Fundamentals of Speech</i>	3	Eng. 100C <i>Fund. of Writing</i>	3
F.A. 100 <i>Intro. to the Visual Arts</i>	3	Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2
*Math. 103 <i>Mathematical Analysis, I</i>	3	*Math. 104 <i>Mathematical Analysis, II</i>	3
Chem. 101 GENERAL COLLEGE CHEMISTRY, I	4	Chem. 102 GENERAL COLLEGE CHEMISTRY, II	4
	16½		15½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed. Activities</i> ½		Phys. Ed. 200B <i>Phys. Ed. Activities</i> ½	
Soc. St. 200A <i>Contemp. Am. Life</i>	3	Soc. St. 200B <i>Contemp. Am. Life</i>	3
Ed. 201 <i>Human Dev. & Behav., I</i>	3	Ed. 202 <i>Human Dev. & Behav., II</i>	3
H. Ed. 100 <i>Healthful Living</i>	2	Sci. 100C <i>The Earth Sciences</i> ...	2
Phys. 101 GENERAL COLLEGE PHYSICS, I	4	Phys. 102 GENERAL COLLEGE PHYSICS, II	4
Biol. 101 GENERAL BOTANY, I ...	4	Biol. 102 GENERAL BOTANY, II (or 4)	3
	16½		15½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3	Ed. 304 <i>Prins. & Tchrs. of Sec. Ed.</i>	3
Lang. 300 <i>Foundations of Language</i>	2	Mus. 100 <i>Music Appreciation</i> ...	2
**Electives	4	Electives	4
Chem. 405 ORGANIC CHEMISTRY, I	4	Chem. 406 ORGANIC CHEMISTRY, II	4
Biol. 201 GENERAL ZOOLOGY, I ...	4	Biol. 202 GENERAL ZOOLOGY, II (or 4)	3
	17		16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3	Ed. 403 <i>Student Teaching</i>	8
Eng. 100G <i>Western World Lit.</i> ...	3	Ed. 4?? <i>Edu. Elective</i>	3
Elective	4	Electives—Humanities	2
Sci. 401 TEACHING OF SCIENCE IN SECONDARY SCHOOL	3	Elective	2
**Phys. 402 MAGNETISM AND ELECTRICITY	4		15
	15		

Total: 128 semester-hours

*While the program allows only the basic mathematics needed by most science teachers, MATH. 103 and 104 does allow the preparation for further study. It is strongly recommended that those specializing in chemistry or physics elect MATH 453 and 454 for more adequate preparation in this area.

*Suggested electives to complete a program of specialization in chemistry include: CHEM. 202 and 203 (Quantitative Analysis), CHEM. 411 (Physical Chemistry I), CHEM. 413 (Atomic Structure and Atomic Energy).

**Those specializing in physics should take PHYS. 402 in lieu of an elective in the fall semester of the junior year. This will then leave 4 s.hrs. more for electives in the fall semester of the senior year.

**Suggested electives to complete the specialization program in physics include: PHYS. 415 (Introduction to Modern Physics), PHYS. 409 (Basic Electronics) and PHYS. 416 (Introduction to Analytic Mechanics).

SCIENCE MAJOR—Elective Program in the Earth Sciences

During the academic year 1961-62, one out of seven high schools in New Jersey were offering courses in the earth sciences. A student can prepare himself for teaching general science and earth science by taking the basic program outlined on the previous pages and supplementing this with electives in the earth science areas. Suggested electives for the earth science specialization include: PHYS. 406 (Astronomy), PHYS. 410 (Meteorology), GEOG. 406 (Geology), and GEOG. 426 (Historical Geology).

Observational Program

In addition to the program outlined, science majors have a regular program of observation and participation in the science classes of the College High School. The program is so arranged that each student observes a complete unit of work at one scheduling. Observation assignments are as follows:

FRESHMAN YEAR	Seventh- or Eighth-Grade General Science
SOPHOMORE YEAR	Tenth-Grade Biology (Biology specialists) Eleventh-Grade Chemistry (Chemistry specialists) Twelfth-Grade Physics (Physics specialists)
SENIOR YEAR	In the fall semester seniors pursue a program of observation and participation in connection with SCI. 401 (The Teaching of Science in Secondary Schools). Observations are made in Eighth-Grade General Science.

MINORS IN SCIENCE

Students who elect to major in another department and minor in a science field may secure approval of the minor program by consultation with the Chairman of the Department of Science.

The Biological Science Minor. The following courses are required for a minor in the biological sciences: BIOL. 101-102 and 201-202, a biology elective, and SCI. 401, making a total of 21 s.hrs.

The Physical Science Minor. The following courses are required for a minor in the physical sciences: CHEM. 101-102, PHYS. 101-102, a physical science elective, and SCI. 401, making a total of 21 s.hrs.

DEPARTMENTAL COURSE OFFERINGS

SCIENCE

Sci. 100A. Physical Sciences	Cr: 4 s.hrs.
(For course description, see page 56)	
Sci. 100B. Biological Sciences	Cr: 4 s.hrs.
(For course description, see page 57)	
Sci. 100C. Earth Sciences	Cr: 2 s.hrs.
(For course description, see page 57)	

Sci. 101 and 102. Problems in Science (honors courses)**Cr: 3 s.hrs. each**

These are interdisciplinary honors courses for exceptional students who are majoring in other departments. Scientific progress in our culture is surveyed and problem areas are identified. A problem is selected by each student for supervised research and laboratory experimentation in depth. The subject content of the course is drawn from all the sciences, including physics, chemistry, biology, and the earth sciences. Both the theoretical and functional aspects of science are stressed. Prerequisite: Selection by the Honors Committee.

Sci. 401. The Teaching of Science in Secondary Schools **Cr: 3 s.hrs.**

The purposes are: to review the educational objectives of science in public schools; to consider a program of instruction planned for all grades of the public-school system; to study the chief aids to instruction such as texts, manuals, workbooks, tests, and materials for the enrichment of teaching; to make a critical review of standards of classroom and laboratory instruction; to observe junior-high-school classes at work in science; and to participate in classroom activities in biology, chemistry, and physics prior to student-teaching. This course is required of all science majors.

Sci. 409. Senior-High-School Physical Science Demonstrations**Cr: 2 s.hrs.**

This course furnishes teachers of the physical sciences with demonstrations and experiments designed for work in high-school chemistry, physics, and applied physical science courses. A detailed study of demonstrations is made with emphasis on visibility and avoidance of failure. Emphasis is placed on sources of new demonstrations.

Sci. 410. Junior-High-School Science Demonstrations **Cr: 4 s.hrs.**

This course covers the methods of experimental instruction appropriate to grades seven, eight, and nine. A detailed study is made of demonstrations for general science at their levels.

Sci. 413. Field Studies in Science: Physical**Cr: 2 s.hrs.**

Emphasis in this course is given to local and New Jersey geology, minerals, soils, and waters, with emphasis on the chemical and physical aspects of soil and water. Field trips are taken through the Kittatinny Mountains and to the Delaware Water Gap.

Sci. 418. Three Centuries of Science Progress**Cr: 2 s.hrs.**

This course includes a study of fundamental world changes that have resulted in the past three hundred years from scientific discoveries. Topics considered are the following: a background of the beliefs and practices of the age; the processes of thought which produced skepticism; the experiments devised to disprove ruling opinions; the new concepts arising from fresh evidence; and the social, economic, and philosophic adjustments following the discoveries.

THE CURRICULA

Stress is given to the nature of scientific inquiry, its cumulative nature, its desire for freedom, and how to judge the probable fruitfulness of a research problem. The role the man of science occupies in the world today is contrasted with his counterpart in earlier centuries. Demonstrations of historical experiments, readings in the original literature, and lectures and discussions are employed.

Sci. 422. Consumer Science

Cr: 2 s.hrs.

The purpose and organization of this course are to acquaint the consumer with the aspects of science in everyday life. Basic scientific principles are developed in the process of testing and evaluating consumer products. Field trips are taken to local industries and public utilities to evaluate processes as well as products. A laboratory testing program deals with commercial products from household appliances to foodstuffs and fertilizers. A testing and instructional program is also developed with a local industry. This course is a general education elective for non-science majors and minors.

BIOLOGY

Biol. 101 and 102. General Botany (Morphology and Physiology of Flowering and Non-Flowering Plants)

Cr: 4 s.hrs. each

These courses acquaint the student with methods and tools of science and develop an understanding of the importance of plants to mankind. Morphology and physiology of the cell and of the plant as a whole are considered first. A survey of the plant kingdom with emphasis on structural development and economic importance follows.

Biol. 102A. General Botany (Morphology and Physiology of Flowering and Non-Flowering Plants)*

Cr: 3 s.hrs.

See description for BIOL. 102. BIOL. 102A involves a weekly laboratory of two clock hours.

Biol. 201 and 202. General Zoology

Cr: 4 s.hrs. each

The animal kingdom is considered with a broad approach. The first semester is devoted to the invertebrates, while the chordates, genetics, embryology, developmental mechanics and evolutionary theory are considered in the second semester.

Unifying principles are developed with stress on form and function within the framework of evolutionary theory. Man's place in the universe is investigated.

Biol. 202A. General Zoology*

Cr: 3 s.hrs.

See description for BIOL. 202. BIOL. 202A involves a weekly laboratory of two clock hours.

*Students specializing in the physical sciences are permitted to take either BIOL. 102A or BIOL. 202A for three semester hours of credit.

Biol. 203. Introduction to Field Biology

Cr: 2 s.hrs.

In this course, the student lives for ten days at the New Jersey

State School of Conservation in the Stokes State Forest where he has the outdoors as his laboratory. Field trips are made to various types of habitats in order to acquire an understanding of the meaning and significance of a "balanced outdoor society." What occurs when this "balance" is disturbed is observed, and methods of and reasons for it are considered. Taxonomy, ecology, and conservation are stressed during this concentrated period of outdoor living.

Biol. 209. Human Biology

Cr: 3 s.hrs.

The course is designed for home economics majors. Bodily structure, functioning of parts, how that functioning affects human behavior are considered. Primary emphasis is placed upon physiology rather than morphology and upon the maintenance of good health of the individual and of the community.

Biol. 210. Elementary Bacteriology

Cr: 4 s.hrs.

The course is concerned primarily with bacteria and fungi associated with food and nutrition, sanitation, hygiene, industry, and disease. Identification of the organisms, their economic importance, and their control are emphasized.

Biol. 212. Mammalian Anatomy for Physical Education **Cr: 3 s.hrs.**

This course covers a study of tissues, skeleton, articulations, ligaments, and musculature system of the human body. Correlated exercises on anatomy of the cat are performed in the laboratory.

Biol. 214. Physiology for Physical Education

Cr: 3 s.hrs.

In this course a study is made of normal physiology, based on previous study of mammalian anatomy. Special attention is given to problems encountered in the teaching of physical education and hygiene. The major systems of the body are studied, reviewing the anatomical and histological bases for their functions. Laboratory exercises enable the student to gain firsthand experience with many aspects of the lecture material. Prerequisite: BIOL. 212.

Biol. 402. Mammalian Anatomy and Histology

Cr: 4 s.hrs.

A study is made of the gross structure of a typical mammal and of the structural peculiarities of its various tissues. Both the anatomical studies and histological studies included in this course are pursued with functional significance strongly emphasized. This course prepares the student for the study of human physiology. Prerequisite: 8 s.hrs. of work in zoology.

Biol. 407. Comparative Embryology

Cr: 4 s.hrs.

A study is made of the stages in development and factors influencing the development of different animal types, particularly the vertebrates. Students in this course follow carefully the development of the chick through the earlier stages. Serial sections of entire chick embryos in different stages of development are prepared by individual students and used as a basis for the study of the development

THE CURRICULA

of tissues and organs of the animal. Applications of these details of vertebrate development to the development of the mammal are based on observations made through the dissection of pig embryos. Prerequisite: 8 s.hrs. of work in zoology.

Biol. 408. Biological Technique

Cr: 4 s.hrs.

The prospective teacher of biology is provided an opportunity to learn the technical details and methods so important to the successful handling of biological specimens, materials, demonstrations and experiments. Instruction is provided in the techniques of collecting and preserving plant and animal specimens for classroom and laboratory use. Displays and illustrative materials and the role of these in classroom and laboratory teaching are considered. Prerequisites: 8 s.hrs. of work in zoology and 4 s.hrs. in botany.

Biol. 409. Human Physiology

Cr: 4 s.hrs.

A study is made of normal and abnormal physiology based on previous study of mammalian anatomy and histology. In addition to an analysis of the part played by organs and tissues in carrying out the essential functions of the body, special attention is given to problems of hygiene and sanitation. Applications of these problems are made in reference to children of school age, and the physical condition of individual pupils is correlated with their behavior in the classroom. Prerequisite: A course in vertebrate anatomy or BIOL. 402.

Biol. 410. Comparative Anatomy of the Vertebrata

Cr: 4 s.hrs.

Representative members of the phylum chordata are studied. The prochordata are considered briefly. Representative species of the cyclostomata, cartilaginous fish, bony fish, amphibia, reptiles, birds, and mammals are studied by means of dissections and demonstrations. Fundamental principles of taxonomy, anatomy, physiology, and ecology are reviewed and amplified. This course should enrich the background of those interested in vertebrate forms and be of value for those interested in man and his place in the world. Prerequisite: 8 s.hrs. of work in zoology.

Biol. 411. Bacteriology

Cr: 4 s.hrs.

General biological phenomena is demonstrated by microbial life by means of laboratory experimentation with bacteria and other microorganisms. Major topics include: history of microbiology, classification, morphology, metabolism and ecology. Emphasis is placed upon the economic importance and the relationship of microorganisms to human welfare, health, and disease. Specific laboratory techniques and procedures are developed in the course.

(It is recommended that the biology minors take BIOL. 210 rather than this course.) Prerequisites: BIOL. 101-102, 201-202, Inorganic and Organic Chemistry.

Biol. 412. Genetics

Cr: 2 s.hrs.

The basic facts, principles, and theories of variation and heredity

as illustrated in microorganisms, higher plants, animals, and man are considered. Modern cytological, embryological, developmental and statistical approaches are developed. The newer concepts of the gene, mutation, and gene action are considered. Practical exercises are used to illustrate the principles. Prerequisite: Elementary Biology of collegiate grade and/or permission of the instructor.

Biol. 413. Economic Botany

Cr: 2 s.hrs.

The consideration of the importance of plants and plant life to the world in general and to man in particular is the principal aim in this course. The economic importance of bacteria, fungi, and other lower plants is considered, as well as that of the seed plants.

Biol. 414. Field Ornithology

Cr: 2 s.hrs.

New Jersey is one of the best areas in the East for the study of birds. On the Montclair campus alone, over 130 species have been observed. This course deals primarily with the identification and natural history of birds. A variety of habitats are visited so that one may become acquainted with the habits and requirements of this unusually well-adapted vertebrate type. Migration, methods of attracting and protecting birds, the value of birds, and related topics are also considered. Prerequisite: A year of biology or the equivalent.

Biol. 415. Entomology

Cr: 4 s.hrs.

Designed to cover the fundamental aspects of entomology, this course gives students general ideas of the entire field. The major emphasis is on understanding basic principles which are of physiological and ecological significance. A survey is made of the common insect families together with experience in identifying major orders and families. Attention is given to insects as economic pests and as vectors of disease. Laboratory work includes a study of gross and microscopic morphology and identification of major groups of insects by the manipulation of keys. Prerequisites: BIOL. 201 and 202.

CHEMISTRY

Chem. 101 and 102. General College Chemistry **Cr: 4 s.hrs. each**

These courses provide opportunity for mastering the fundamentals of chemistry, for understanding the numerous and far-reaching effects of contributions of chemistry to modern living, for training in scientific method, for developing facility in taking and utilizing laboratory notes, and for learning to use standard reference books. The laboratory contains many experiments of value for demonstration in high-school chemistry. A major portion of the laboratory work in the second semester is qualitative analysis.

Chem. 103 and 104. Chemistry for Home Economics **Cr: 3 s.hrs. each**

These courses provide an opportunity for students of home economics to become acquainted with the major principles of chemistry

THE CURRICULA

and their application in the field of home economics. The first semester deals with topics selected from the field of inorganic chemistry. The second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to home economics. Class discussions, reference work, laboratory and field trips attempt to show the importance of chemistry to the field of home economics.

Chem. 105 and 106. Chemistry for Physical Education

Cr: 3 s.hrs. each

This course provides an opportunity for students of physical education to become acquainted with the major principles of chemistry and their applications in the field of physical education. The first semester deals with topics selected from the field of inorganic chemistry. The second semester deals with the fundamentals of organic chemistry, and the applications of biochemistry to physical education. Class discussions, reference work, laboratory and field trips attempt to show the importance of chemistry to physical education.

Chem. 202. Analytical Chemistry: Quantitative Analysis Cr: 4 s.hrs.

The purposes are: to develop and apply the fundamental principles of solutions, to perfect the techniques of chemistry, to analyze quantitatively substances, and to use the chemical balance. The work covers that chemistry needed for gravimetric and volumetric analysis. The laboratory work involves gravimetric analysis, acidimetry and oxidation-reduction reactions. Prerequisites: CHEM. 101, 102.

Chem. 203. Analytical Chemistry: Applied Quantitative Analysis

Cr: 4 s.hrs.

Purposes are: to develop techniques needed for routine methods of analysis of common substances, and to give experience in the application of chemistry to soil analysis, blood analysis, food analysis, and household preparations. The work covers the electrochemical theory of oxidation-reduction, modern atomic theory and its applications to understanding analytical procedure, theory of colorimetry, and the measuring of hydrogen ions. Prerequisite: CHEM. 202.

Chem. 405. Organic Chemistry

Cr: 4 s.hrs.

The course in chemistry of carbon compounds gives increased facility and experience in manipulating complicated apparatus. It treats chemistry in life processes, including the synthesis and adaptation of carbon compounds in industry, medicine and daily living. The work covers the chemistry of simple chain compounds and includes fats and carbohydrates. Prerequisites: CHEM. 101 and 102.

Chem. 406. Organic Chemistry

Cr: 4 s.hrs.

The work covers the chemistry of multiple functional chain compounds, the ring compounds, proteins, vitamins, hormones, and the

application of these compounds in industry, in foods, and in medicine. Prerequisite: CHEM. 405.

NOTE: Biological science majors are permitted to take the second semester of Organic Chemistry for three semester-hours of credit. Those students will enroll for CHEM. 406A. The laboratory work for CHEM. 406A involves two clock hours per week in lieu of the four clock hours required for those students enrolling in CHEM. 406.

Chem. 406A. Organic Chemistry

Cr: 3 s.hrs.

(See description for CHEM. 406. CHEM. 406A involves a weekly laboratory of two clock hours.)

Chem. 407. Advanced Quantitative Analysis

Cr: 4 s.hrs.

This course is adapted to the needs of students. The student, after consultation with the instructor, may select analyses from the following: general or special types of oxidation-reduction; gravimetric methods; colorimetric methods; use of organic reagents in analyses; electrometric titrations, conductimetric titrations; spectrographic methods of analysis; electro-deposition of metals; and special methods of analysis. Prerequisites: General college physics and one semester of quantitative analysis, or permission of the instructor.

Chem. 408A. Industrial Chemistry, Part I

Cr: 2 s.hrs.

The purpose is to enable science teachers to understand the type of chemical industries in the State of New Jersey and the nature of their problems. A survey is made by lectures, reports, and trips to plants of the chemical industries. This section of the course stresses the importance and the characteristics of chemical industry, the various unit operations used by the industry to carry out chemical reactions, the controls used to insure quality, the organization for research, and the type of workers employed. Prerequisites: General and organic chemistry, or special permission of the instructor.

Chem. 408B. Industrial Chemistry, Part II

Cr: 2 s.hrs.

This course is a study of the chemical industries of the metropolitan area utilizing the methods outlined in CHEM. 408A. Also, a study is made of the economics of chemical industry, chemistry and industry in general, and the effects of chemical discoveries upon living conditions. Prerequisites: General and organic chemistry, or special permission of the instructor.

Chem. 411. Physical Chemistry, Part I

Cr: 4 s.hrs.

This course, the first half of a year's work in physical chemistry, deals with gases, liquids, crystals, physical properties and electrolytes, colloids, thermo-chemistry, and homogeneous and heterogeneous equilibria. Prerequisites: General college chemistry, analytic chemistry, and general college physics.

THE CURRICULA

Chem. 412. Physical Chemistry, Part II

Cr: 4 s.hrs.

This course deals with electrical conductance, electrolytic equilibrium, electromotive force, electrolysis, polarization, chemical kinetics, photochemical reactions, atomic structure, molecular structure, and radioactivity. Prerequisites: General college chemistry, analytical chemistry, and general college physics.

Chem. 413. Atomic Structure and Atomic Energy

Cr: 2 s.hrs.

This is a lecture course designed to familiarize the student with a modern conception of the structure of matter and to acquaint him with some significant aspects of atomic energy. Some of the topics: discoveries leading to knowledge of the structure of the atom; isotopes; nuclear fission; nuclear reactions; chemical versus atomic explosions; the chain-reacting pile; production of plutonium; detection and measurement of nuclear radiation and incendiary effects of atomic explosions; atomic energy for peace-time uses; radio-active isotopes in agricultural, biological, and chemical research; and availability of materials. Prerequisites: General college chemistry and general college physics, or special permission of the instructor.

Chem. 414. Introduction to Radiochemistry

Cr: 2 s.hrs.

This course is an introduction to the use of radioisotope experiments for the chemistry curriculum. The course consists of lecture and laboratory work which covers such topics as detection instruments, counting techniques, sample preparation, radiochemical separations by co-precipitation, chelation, and ion-exchange techniques. Prerequisites: General college chemistry, general college physics, or special permission of the instructor.

PHYSICS

Phys. 304. Introduction to Photography

Cr: 4 s.hrs.

This is a beginning course consisting of laboratory work and field work supplemented by lectures and demonstrations. Some of the topics covered are: the construction and operation of cameras, common films and papers, fundamental chemistry of photography, development and printing. A student needs at least one camera. ,

Phys. 305. Acoustics

Cr: 2 s.hrs.

This course offers science and non-science majors a practical approach to the study of sound. It provides a knowledge of the means and processes by which sound is produced, controlled, transmitted, and recorded. The student explores such topics as the nature and transmission of sound, harmonic motion, hearing, speech, musical instruments, and architectural acoustics. The course consists of lectures, demonstrations, class discussions, laboratory, field trips, and films to show the application of acoustics to everyday living.

Phys. 306. Household Physics**Cr: 3 s.hrs.**

This course covers the areas of mechanics, heat, electricity, and light. The emphasis is on the applications to equipment used in the home. The course is correlated with the work in household equipment in the Home Economics Department. The course consists of demonstrations, lecture-discussions, and laboratory experiments. The laboratory work, wherever possible, is done with common household equipment. The work of the mechanics unit develops the fundamentals of machines, and the ideas of work, power, and efficiency; in the heat unit, heating efficiency of stoves, home heating systems, and insulation are covered; in the electrical unit emphasis is on adequate wiring and understanding of the operation of electrical appliances, while the light unit is related to illumination in the home.

Phys. 308. Elementary Astronomy**Cr: 2 s.hrs.**

This course in descriptive astronomy is designed for the general student. Today lay people, and especially college students, are developing an avid interest in our environment beyond the surface of the planet on which we live—we are looking to our neighbor planets in new perspective. Acquisition of a working knowledge and appreciation of the tools of the astronomer; the nature of the solar system; location of points on the celestial sphere; motions and laws relative to systems; the nature, classification, and magnitudes of stars; and cosmogony are course objectives.

Phys. 402. Magnetism and Electricity**Cr: 4 s.hrs.**

The purposes of the course are: (1) to provide a background of training in the fundamental laws and principles governing the generation and use of electricity; (2) to develop skill in manipulating laboratory and demonstration apparatus; and (3) to learn the basic principles of alternating current circuits.

This course consists of lectures, demonstrations, reference readings, written and oral reports, laboratory experiments with modern electrical instruments, and construction of simple electrical devices. Some of the topics studied are: modern concepts of the electronic structure of matter, electrical forces, magnetic fields, potential, resistance, impedance, capacitance, and characteristics of thermionic vacuum tubes. Prerequisites: PHYS. 101 and 102.

Phys. 405. Light and Optical Instruments**Cr: 4 s.hrs.**

Topics included for study in the classroom and laboratory are: the propagation of light; emission and absorption of radiant energy; reflection, refraction, polarization; spectrum analysis; photometric measurements; photoelectric cells; measurement of high temperatures; characteristics of illumination, modern illuminants; and industrial and domestic uses of light. Prerequisites: General college physics, a course in electrical measurements.

THE CURRICULA

Phys. 406. Astronomy

Cr: 4 s.hrs.

This course is designed to acquaint the student with the celestial sphere, celestial motions, and the phenomena associated therewith; to make him aware of the principles of astronomy. It consists of a survey of the solar system, practical problems in locating and identifying celestial bodies, a consideration of light and matter, the basic laws of motion, the physical-chemical properties of the sun and stars, stellar scales and maps, the measurement of distance, the cosmology of the universe, the history of astronomical concepts, and the regularities, irregularities, and evolution of the solar system.

This study is aided by the use of selected films and slides, actual sky study and field trips, the use of the sextant, octant, transmit, spectroscope, sky maps, planetaria, and telescopic observations. Prerequisites: General college physics and chemistry.

Phys. 407. Aviation

Cr: 4 s.hrs.

This course deals with the historical development of aviation, air traffic rules, air-worthiness regulations, pilot certification, types of aircraft, aircraft structures, principles of aerodynamics, lift, drag, stability, motions of an airplane, piloting, motorless flight, aircraft engines, power performance, types of propellers, engine instruments, and flight instruments.

Field trips to airport and aviation industries are included. Flight experience is made available as a part of this course. Prerequisites: PHYS. 101 and 102.

Phys. 409. Basic Electronics

Cr: 4 s.hrs.

An introductory course in basic electronic phenomena covering such topics as elementary circuit theory, electron emission, vacuum tube characteristics, vacuum tubes as circuit elements, gaseous discharge, and the use of transistors. Applications of electronics to instrumentation, radio, and television are introduced. Prerequisites: General college physics, and a course in magnetism and electricity.

Phys. 410. Meteorology

Cr: 2 s.hrs.

This course develops a fuller appreciation of our atmosphere with emphasis on meteorological applications of physical principles. Consideration is given to weather elements; temperature effects; air currents, air masses, and fronts; the collection, dissemination, and interpretation of weather data; and the general applications of meteorology. The student is expected to learn to use meteorological instrumentation, and emphasis is placed upon the improvisation of apparatus and equipment. Prerequisites: PHYS. 101 and 102.

Phys. 411. Photography

Cr: 4 s.hrs.

This course consists of laboratory work and field work supplemented by lectures and demonstrations. Emphasis is placed on physical principles in the construction of cameras, projection printers,

tanks, and filters. Special attention is given to chemical principles in the development of films and paper, toning, intensification, and reduction. Prerequisites: General physics and general chemistry or permission of the instructor.

Phys. 415. Introduction to Modern Physics **Cr: 4 s.hrs.**

This course is designed to give the student a general view of the important advances in physics during the past fifty years. In the first part of the course considerable time is spent in the study of electron theory. Some of the topics considered are: the hydrogen atom, optical and X-ray spectra, natural radioactivity, cosmic ray, nuclear fission, new elements and isotopes, and particle accelerators. Some laboratory work is required. Prerequisites: General college physics, general college chemistry, and a course in electrical measurements.

Phys. 416. Introduction to Analytic Mechanics **Cr: 4 s.hrs.**

This course is a background for science teachers. It includes some treatment of the physics of classical mechanics, of the kinematics and dynamics of particles, and the dynamics of rigid bodies. Mathematical methods of handling data and theory are introduced and developed. The course consists of lectures, discussions, demonstrations of practical application, and problem solving. There are two hours of lecture-recitation and four hours of laboratory work per week. Prerequisite: General college physics.

COURSES OFFERED AT THE NEW JERSEY STATE SCHOOL OF CONSERVATION

Sci. 405. Field and Laboratory Studies in Science **Cr: 4 s.hrs.**

This integrated course is designed to show the relationship in the geological rock formations, the types of soil, water patterns, plant communities, and animal inhabitants in northern New Jersey, and the effects on human occupations. The field trips are for the purpose of gathering data and materials for intensive work in the laboratory. The experiments are designed to give the student acquaintance with the science of common, but possibly unstudied features of the landscape; e.g., soils are reproduced in profile and examined microscopically, physically, and chemically; water from a variety of sources is tested for biological and chemical impurities; the census of plant and animal inhabitants of typical areas is associated with relevant factors in the environment. Discussions precede and follow the field and laboratory work to establish the probable history of the area and to suggest the probable trend, whether advancing or retrogressing, of its development. Stress is placed on the kinds of human control in specific communities which would best serve their progress.

Students are asked to submit an analysis of the geological and biological features of some known community, based on the skills and principles learned. Some other objectives of the course include an understanding of the organization of school museums for learning

THE CURRICULA

purposes, the making of ecological maps and illustrating them with photographs and diagrams, and the techniques of ecological field trips. Two instructors, a chemist and a biologist, collaborate in giving this course. Prerequisite: Proficiency in biology and chemistry.

Sci. 411. Problems in Field Studies in Science **Cr: 2 s.hrs.**

Each student selects a phase of field science in which he does advanced research under guidance of the instructor. Plant ecology, bird-life, pond life, fungi, tree diseases, and insect life are a few of the areas from which the student may choose. Prerequisites: Field Studies in Science or equivalent plus at least 12 points of biology.

Sci. 412. Field Studies in Science: Biological **Cr: 2 s.hrs.**

Extensive instruction in the identification and natural history of fauna and flora is given in this course. Students examine the ecology of plant and animal communities (terrestrial and aquatic) and relate such communities with man's use of natural resources. The relation of field activities to present school curricula is considered. No previous science courses are required.

Sci. 414. Conservation of Plants and Animals **Cr: 2 s.hrs.**

The social, economic, and ecological implications of plant and animal conservation are considered together. Discussion periods are interspersed with field trips to forest and wildlife management areas. Cooperating experts from state and federal agencies bring contributions in their fields. Visual aids are used extensively.

Sci. 415. Conservation of Soil and Water **Cr: 2 s.hrs.**

The social, economic, and ecological implications of soil and water conservation are considered together. Discussion periods are interspersed with field trips to selected areas. Outside experts bring contributions in their fields. Visual aids are used extensively.

Sci. 419. Field Science and Conservation **Cr: 2 s.hrs.**

In this course students study phases of field science which are related to conservation. The components of soil and water which produce good crops are studied. Students gain an understanding of farm practices by visiting several nearby farms. Forest and wood-lot management, wildlife preservation, mineral resources use, and other important areas in which science influences the conservation of natural resources are investigated.

Sci. 420. Water Supply and Conservation Problems **Cr: 3 s.hrs.**

This course is designed to provide students with an opportunity to do an extensive study of the water supply problems in New Jersey and surrounding states. A study of water tables, rainfall, irrigation, drainage, flooding, water shed management, stream pollution, and soil erosion gives students a background for understanding the problems involved in domestic and industrial use of water. State and regional water conservation projects are studied.

THE DEPARTMENT OF SOCIAL STUDIES

Kops (*Chairman*), Alloway, Barker, Bell, Bye, Cohen, Fincher,
Gallagher, Hourtoule, Johnson, Moffatt, Pironti, Quintana,
Rellahan, Royer, Zimmer

The social studies teacher requires a competence in a very wide knowledge of the facts of social life, both past and present. He needs not only to know the facts, but to be able to think about them. Even more important, he must know how to impart his knowledge to younger people and to stimulate their thinking and assist in the development of attitudes. The secondary schools of today are rightfully expected to train for a citizenship which is alert, informed, and socially sensitive. The social studies teacher must bear a large responsibility for the accomplishment of this result.

The Social Studies Department offers a wide range of courses in the various subjects which make up the broad field of the social studies. This department offers for all students, whether social studies majors or not, a course in *The Development of World Civilization* which presents a rapid survey of the civilizations of the past. Likewise all students, regardless of major, are offered a course in *Contemporary American Life* designed to develop an understanding of and give experiences in contemporary society.

Social Studies majors are required to follow a program of courses which are at once broad and yet thorough in those areas which best meet the needs of secondary school teachers. The courses in European history and American history, as well as those in economics, politics, and sociology, contribute largely to an understanding of present-day problems.

The aim is that in each of these fields, as the subject matter is studied, there shall also be considered the problems of teaching in that field. But in addition to this professionalization of subject-matter, every social studies major is required to take in the senior year a specialized course in the methods of teaching the social studies.

THE CURRICULA

SOCIAL STUDIES MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>		S.H.	<i>Spring Semester</i>		S.H.
Phys. Ed. 100A <i>Phys. Ed.</i>			Phys. Ed. 100B <i>Phys. Ed.</i>		
<i>Activities</i>	$\frac{1}{2}$		<i>Activities</i>	$\frac{1}{2}$	
Soc. St. 100A <i>Dev. of World Civ.</i>	3		Soc. St. 100B <i>Dev. of World Civ.</i>	3	
Eng. 100C <i>Fund. of Writing</i>	3		Speech 100D <i>Fund. of Speech</i>	3	
Mus. 100 <i>Music Appreciation</i>	2		F.A. 100 <i>Intro. to the Visual Arts</i>	3	
Sci. 100A <i>Physical Science</i> or			Sci. 100C <i>The Earth Sciences</i>	2	
Sci. 100B <i>Biological Science</i>	4		Ed. 100 <i>Mental Hygiene & Personal Adjustment</i>	2	
Soc. St. 101 <i>DEV. OF MODERN EUROPE, I</i>	3		Soc. St. 102 <i>DEV. OF MODERN EUROPE, II</i>	3	
		<hr/>			<hr/>
		15½			16½

SOPHOMORE YEAR

Phys. Ed. 200A <i>Phys. Ed.</i>			Phys. Ed. 200B <i>Phys. Ed.</i>		
<i>Activities</i>	$\frac{1}{2}$		<i>Activities</i>	$\frac{1}{2}$	
Soc. St. 200A <i>Contemp. Am. Life</i>	3		Soc. St. 200B <i>Contemp. Am. Life</i>	3	
Ed. 201 <i>Human Dev. & Behavior, I</i>	3		Ed. 202 <i>Human Dev. & Behavior, II</i>	3	
Eng. 100G <i>Western World Literature</i>	3		H. Ed. 100 <i>Healthful Living</i>	2	
Electives	4		Electives	5	
Soc. St. 201 <i>DEV. OF THE UNITED STATES, I</i>	3		Soc. St. 202 <i>DEV. OF THE UNITED STATES, II</i>	3	
		<hr/>			<hr/>
		16½			16½

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3		Ed. 304 <i>Prins. & Techs. of Sec. Ed.</i>	3	
Math. 300 <i>Social Uses of Math.</i>	2		Math. 400 <i>Statistics</i>	2	
Electives	5		Lang. 300 <i>Found. of Lang.</i>	2	
Soc. St. 301 <i>ECONOMICS</i> or			Electives	3	
Soc. St. 302 <i>FIELD STUDIES IN URBAN LIFE</i>	3		Soc. St. 302 <i>FIELD STUDIES IN URBAN LIFE</i> or		
Soc. St. 304A <i>AMERICAN GOVERNMENT, I</i>	3		Soc. St. 301 <i>ECONOMICS</i>	3	
		<hr/>	Soc. St. 304B <i>AMERICAN GOVERNMENT, II</i>	3	
		16			<hr/>
					16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i>	3		Ed. 403 <i>Student Teaching</i>	8	
Elective— <i>Humanities</i>	2		Ed. 4?? <i>Education Elective</i>	3	
Electives	5		Elective— <i>Mathematics or Science</i>	2	
Soc. St. 401 <i>TEACHING OF SOCIAL STUDIES IN SECONDARY SCHOOL</i>	3		Soc. St. 403 <i>SEMINAR IN SOCIAL STUDIES</i>	2	
Soc. St. <i>AREA STUDY</i>	3				
		<hr/>			<hr/>
		16			15

Total: 128 semester-hours

NOTE: 9 semester-hours of electives are required in a secondary teaching field other than the major.

Social studies majors are required to make at least sixty observations in the College High School, for the most part in the junior and senior years. In so far as it is possible, these observations should cover the range of high-school classes from the seventh to twelfth

grades and should be so organized as to follow the development of entire teaching units.

MINORS IN THE FIELD OF THE SOCIAL STUDIES

There are two minors in the field of the social studies; one in history, the other in political science and economics.

The Development of World Civilization (Soc. St. 100A and 100B) may be counted for six credits toward the twenty-one necessary to complete the minor in history. Soc. St. 201 and 202 and Soc. St. 101, 102 and 401 must be used to complete the minor.

Contemporary American Life (Soc. St. 200A and 200B) may be used for six of the twenty-one credits necessary for the minor in political science and economics. The remaining twelve credits should consist of Soc. St. 301, 303, 304A, 304B, and 401.

DEPARTMENTAL COURSE OFFERINGS

Soc. St. 101. The Development of Modern Europe, Part I

Cr: 3 s.hrs.

The course deals with the differentiation in pattern of the rising national states of England and France, politically, economically, culturally, and the contraction of the Holy Roman Empire; the period of the Reformation not only in its religious aspect but in the political, economic, intellectual, and national; the development of parliament under the Tudors and Stuarts; the rise of both Russia and Prussia as states; the French Revolution and the period of Napoleon.

Soc. St. 102. The Development of Modern Europe, Part II

Cr: 3 s.hrs.

This course includes the main political, economic, social, intellectual, and cultural developments in Europe since the Congress of Vienna; the Industrial Revolution, the rise of liberalism, nationalism, imperialism, and democracy; the unifications of Italy and Germany. The growing factors responsible for World Wars, I and II, are discussed. The main purpose of this study is to establish an understanding of the period in relation to the modern world.

Soc. St. 201 and 202. The Development of the United States (1492-Present)

Cr: 3 s.hrs. each

These courses constitute a general survey of the development of the American nation from the period of discovery and exploration to the present. Opportunity is given to examine, analyze, and interpret the development of the main streams of American thought and action. Due consideration is given to political trends, but the year's work also treats of the economic, cultural, and social foundations of American institutions.

Soc. St. 301. Economics

Cr. 3 s.hrs.

This course aims to provide the student with a detailed knowledge of the development and function of American economic institutions, the maladjustments that are apparent, and the changes that are in progress. The topics are: the corporation, banks, capital, industrial and agricultural production, problems of consumption, monopoly, foreign exchange, market price, and the distribution of wealth.

Soc. St. 302. Field Studies in Urban Life

Cr: 3 s.hrs.

This is a field-studies course in which the New York Metropolitan area is used as the laboratory, and the social, economic, and political activities of the people of the area constitute the subject-matter. The course is designed to furnish first-hand experiences complementary to all other social studies courses, to reveal new horizons, and to train the student in field-work techniques. Studies are made of levels of living, minority groups, governmental services, economic institutions, and the historical and geographic background of the region.

Soc. St. 304A and B. American Government: Local, State, and National

Cr: 3 s.hrs. each

These courses are designed to present a picture of American government as a whole, rather than as separate compartments, labeled "local", "state", and "federal". Legislation, administration, and adjudication are treated as processes which occur at all levels of government. Contrasts are drawn when differences exist among local, state, and federal organization and function. Throughout the course, examples are taken from the municipal, county, and state governments of New Jersey to acquaint the student with his immediate governmental environment. This effort also tends to correct the undue emphasis ordinarily placed upon the federal government.

Soc. St. 401. The Teaching of the Social Studies in Secondary Schools

Cr: 3 s.hrs.

The course aims to present recent tendencies in educational method in teaching the social studies. A program is presented containing the correlation of subject-matter organization in socialized recitation, the teaching of current events, projects in citizenship, and the use of the project-problem as a method of teaching history and civics. A laboratory containing texts and workbooks in the social studies field is available to the students of this course.

Soc. St. 402. Comparative Governments

Cr: 2 s.hrs.

This course offers an opportunity to study the political systems of the major world powers. Attention is given to the political institutions of Great Britain, France, and the Soviet Union. Communist China, India, and Brazil are other nations whose governments are used for purposes of comparison. In each instance, political institutions are viewed against their economic and social backgrounds. Frequent comparisons are drawn between the American federal government and the foreign governments considered in this course.

Soc. St. 403. Seminar in Social Studies: Basic Issues in the Social Studies**Cr: 2 s.hrs.**

This offering is designed for social studies majors when they return from student teaching. As its title suggests, the course is built around issues which have long been considered fundamental to an understanding of American democracy.

Soc. St. 408. A History of New Jersey**Cr: 2 s.hrs.**

This course assists teachers in acquiring a better knowledge of their state. A study is made of the history of New Jersey from the point of view of the social, political, economic, and cultural development of the people from the beginning of the settlement to the present. Attention is given to the geographical and industrial aspects of the state and the place of New Jersey in the national setting.

Soc. St. 412. International Government**Cr: 2 s.hrs.**

The attempts of the international community of states to express itself in a formal world organization are the subject of this course. The agencies which have been established to deal with international, legislative, executive, administrative, and judicial problems are studied. Specifically, among the topics discussed are: the national State system, sovereignty, equality, intervention, international law, diplomatic services and procedures, international conferences and unions, sanctions, treaties, arbitration, international courts of justice, armaments and war, League of Nations, International Labor Organization, regional agreements, the United Nations.

Soc. St. 413. Economic History of the United States**Cr: 2 s.hrs.**

The great trends and movements in agriculture, finance, commerce, manufacturing, transportation, and industrial relations are traced from their beginnings in the colonial period to their contemporary expressions in the present crisis. This course supplements, but it does not duplicate, courses in the political history of the United States or courses in economic principles and problems.

Soc. St. 423. Classical Civilization**Cr: 2 s.hrs.**

This course traces the social changes in Rome from the earliest times to the end of the Western Roman Empire. Attention is directed to the earliest features of Roman civilization and to the changes—political, social, and economic—resulting from Etruscan, Carthaginian, and Greek influences. The rise and fall of the empire are discussed with relation to their importance in medieval civilization.

Soc. St. 425. Medieval Civilization**Cr: 2 s.hrs.**

This course examines the origins and development of Medieval civilization in Western Europe from the decline of Rome to about 1350. Study is made first of the Early Middle Ages, including the conversion of Europe to Christianity, monasticism, feudalism and

THE CURRICULA

manorialism. Emphasis then turns to the emergence of a distinct civilization by the 12-13th Centuries: the development of towns and trade, a powerful Church, dynastic monarchies, universities, art, literature and philosophy. An analysis is made of the relation of Medieval civilization to the subsequent civilization of the Renaissance.

Soc. St. 432. The Twentieth Century World **Cr: 2 s.hrs.**

This course is designed to emphasize a topical consideration of significant movements, events, and personalities of the Twentieth Century. Trends and topics to be studied include an historical background of the major political "isms" of the period, scientific and technological advances, social forces, economic theories and experiments. Considerable thought is given to specific contemporary problems facing the world, especially those emerging nations of Asia, Africa, and South America.

Soc. St. 433. American Political Thought **Cr: 2 s.hrs.**

This course deals with contemporary trends and theories as they have emerged from social and economic conditions and as they are founded upon the bases laid down by Hamilton, Madison, Washington, Jefferson, Marshall, Calhoun, Webster, Lincoln, and Wilson.

Soc. St. 435. The Development of Latin America **Cr: 3 s.hrs.**

This course deals with Latin America from the pre-Columbian era to the end of the wars of independence. Stress is placed upon the geographical background, and the development of the Maya, Inca and Aztec civilizations. After considering the Spanish and Portuguese backgrounds of the Latin-American people, consideration is given to the European cultures established in the New World. In dealing with the wars of independence in Latin America, comparisons are made with the American Revolution.

Soc. St. 437. The Political Party System in the United States

Cr: 2 s.hrs.

The topics are: party organization, the political boss, the political machine, party finances, the process of voting, election laws, primaries, conventions, platforms, presidential elections, majority rule, the party system, sectional politics, the farm vote, the labor vote, and the future of party government in the United States.

Soc. St. 438. The Literature of American History **Cr: 2 s.hrs.**

The purpose is to familiarize the student with the writings and sources of United States history. Social, economic, political, geographic, and other interpretations are studied and compared. Writings of a group of representative American historians are examined. A general survey and evaluation are made of the primary and secondary sources available for the study of United States history.

Soc. St. 440. Modern Latin America **Cr: 3 s.hrs.**

This course is designed to give an understanding of the economic,

social, and political character of contemporary Latin-America. This may be considered as an area study in that geographical factors are given great emphasis, along with political considerations. The history of these nations from their wars of independence to the present serves as background for the present state of affairs in this region. Students are given an opportunity to read works of Latin-American authors, to hear speakers from that area, and to see recent films.

Soc. St. 441. Economic History of Europe **Cr: 2 s.hrs.**

The study of Europe from an economic point of view is particularly important in the light of present European problems and their relation to world-wide conditions. This course is a survey of the economic life and development of Europe from the emergence of the ancient civilizations to the beginning of the modern economic world. It gives special attention to economic causes that underlie the dislocation and perplexities of the last century.

Soc. St. 442. The Far East **Cr: 3 s.hrs.**

A study is made of the economic, social, and cultural situation of the Far East, with particular emphasis on the historical background of China and Japan, and of our relations with the Philippines. Oriental folkways, religion, education, population shifts, and strategic questions are discussed. This course provides an approach to the problems the United States must face in the Far East.

Soc. St. 443. Youth and the Community **Cr: 2 s.hrs.**

This course is a sociological study of youth in its many relations to the community. Special attention is given to problems which arise in the relationship of youth and the community; e.g., juvenile delinquency, conditions contributing to maladjustment, poorly adjusted children, and educational and social agencies active in solving youth behavior. Through the study of concrete cases, special treatment and community research are demonstrated.

Soc. St. 445A and B. Introduction to Anthropology **Cr: 2 s.hrs. each**

These courses provide an introduction and study of human origins, early man, race, language, and physical anthropology, and it surveys the development of cultures and considers inventions and adaptation and other processes of cultural growth and change. Attention is focused upon the origins and growth of human civilization and the place of the individual in the framework of society.

The basics of anthropology including related elements in biology and physical science are studied. There is emphasis on the social, institutional, and cultural outcomes of such study with a view to its applicability to the several social studies as a means of enriching social studies and aiding in their understanding.

Soc. St. 446. Current Problems in Economics and Government

Cr: 2 s.hrs.

Designed to analyze the relationship of economics to government.

THE CURRICULA

the causes and results of governmental activity are discussed in the light of their economic significance and bearing on public welfare through a study of certain classical decisions of the Supreme Court involving those cases relating specifically to economic issues.

Soc. St. 447. Diplomatic History of the United States Cr: 2 s.hrs.

The purpose of this course is to show how we have become gradually conscious of our world interests and responsibilities, and the important role we have come to play in international politics. The growing concept of world democracy as opposed to commercial and military imperialism, is stressed.

Soc. St. 448. Cultural Diversity Cr: 2 s.hrs.

The study of primitive and folk cultures is seen in contemporary perspective. The purpose is to increase student awareness of the range and variety of cultures in today's world, and to improve understanding of factors which account for cultural diversity.

Soc. St. 449. South Asia Cr: 3 s.hrs.

Designed to give an understanding of political, economic, social, and cultural problems of contemporary South Asia, emphasis is given to post-World War II domestic problems of India, Pakistan, Ceylon and their international relations with the world community.

Soc. St. 451. The Middle East Cr: 3 s.hrs.

This course is a survey of Indian and Moslem civilization. It shows that economic and political changes alone do not suffice to adjust the peoples of the Middle East to Twentieth-Century civilization, and that many cultural traditions must vanish while some forgotten features of the past are to be revived. Post-war planning for the region from the Near East through Persia, India, Burma, Thailand, and Malaya to the Netherland East Indies is discussed.

Soc. St. 456. International Economic Relations Cr: 2 s.hrs.

The purpose is to study the significance of international trade and exchange to the economic life of our nation and the world economy. An analysis of the economic philosophies relating to international economic organization is made. Emphasis is given to policies which tend to promote freer trade, including classical doctrine of comparative costs, the Reciprocal Trade Agreements Act, and the International Bank and Currency Stabilization Fund.

Soc. St. 457. Development of Russia Cr: 2 s.hrs.

Factors which shaped the Russian people, such as Byzantinism and the Greek Orthodox faith, the Synod, Tartar state organization, the Mir, Westernization from Peter to Lenin, Slavophilism and dialectic materialism, are emphasized. An account is presented of Soviet internal organization, Sovkhoz, Kolkhoz, and the Five-Year plans. In addition to the historical background, Russia's great writers

are discussed in the light of social and political developments.

Soc. St. 458. Russia as a World Power

Cr: 2 s.hrs.

An analysis of Russia's relations with China, Iran, Turkey, the European continent, England, and the United States is presented. Marxist world policy, as interpreted by Kautsky, Plekhanov, Jaures, Bukharin, Trotsky, Lenin and, Stalin, is described. The changing views of Second and Third Internationals, and the organization and methods of the Comintern are discussed. A chronological account of Soviet diplomacy, since Chicherin, is offered.

Soc. St. 460. Central Eastern Region

Cr: 3 s.hrs.

This fifteen-day tour of Pennsylvania, Maryland, Virginia, West Virginia, North Carolina, and Tennessee covers the major points of historic interest associated with the Colonial Period, the American Revolution, and the Civil War, and the geographic features of the coastal plain, the Piedmont, the Great Valley, and the Appalachian Mountains in these states.

Soc. St. 461. New England and French Canada

Cr: 3 s.hrs.

This field-study course gives an opportunity to study by direct observations the historical and geographical features of New England and the Province of Quebec. This trip, occupying the twelve days immediately following the summer session, is made in a modern chartered motor coach with overnight stops at first-class hotels.

Soc. St. 462. Continental United States

Cr: 10 s.hrs.

This field-study course consists of sixty-two days of directed travel, including all of July and August, and provides an opportunity for gaining an integrated view of our country as a whole. All important geographic and historical features are studied under the instructions of members of the college faculty and local specialists.

Soc. St. 466. Puerto Rico and the Virgin Islands

Cr: 2 s.hrs.

This is a nine-day field-study course devoted to a survey of our nearest island possessions. It includes an exploration of San Juan and its vicinity, including the University, the rain forest and the submarine gardens, a two-day trip through the island visiting pineapple, coffee, sugar, textile, and rum producing areas, churches, homes, and historic places. One day is spent in St. Thomas, largest of the Virgin Islands. The trip to and from the islands is made by air. It is usually offered during the Christmas holidays.

Soc. St. 467. Florida

Cr: 2 s.hrs.

This is a field-study course covering the Florida peninsula including both coasts, the Everglades, and the Lake Region. Among the places visited are ancient St. Augustine; the winter playgrounds at Palm Beach and Miami; the Tamiami Trail through the Everglades; the west coast cities of Sarasota, St. Petersburg, and Tampa; and

THE CURRICULA

the Lake Region in the neighborhood of Lake Wales and Orlando. The trip affords opportunity for topographical, historical, and industrial studies. It is usually given during the Easter vacation.

Soc. St. 469. Mexico

Cr: 3 s.hrs.

This field-study course aims to give a comprehensive view of contemporary Mexican life with its geographic, economic, historic, and cultural setting. Transportation to and from Mexico City is by air and in Mexico by private cars. Places visited include Xochimilco, Acolman, Teotihuacan, Fortin, Pueblo, Oaxaca, Guadalajara, Quatero, Guanajuato, Patzcuavo, San Miguel de Allende, San Jose, Purua, Morelia, Toluca, Taxco, and Cuernavaca. The itinerary is carefully planned to include all points of major interest and significance. Special studies may be made in geography, history, art, architecture, archaeology, sociology, economics, and other fields.

Soc. St. 471. The United States Since World War I

Cr: 2 s.hrs.

This course surveys the major problems, economic, social, political, and international, which have marked our national development since the end of the first World War. It is intended especially for social studies seniors as a preparation for the second year of secondary school American history.

Soc. St. 474. America in Transition

Cr: 2 s.hrs.

This course surveys rapidly the results of the Civil War and then emphasizes the major trends, economic and social, which have made modern America. It is intended as a more advanced study than that which is made in the undergraduate course. The period covered is from 1867 to around 1914.

Soc. St. 475. The History of American Thought

Cr: 2 s.hrs.

This course considers the influential thinking in America from the Mayflower Compact to the Marshall Plan to see how certain ideas or trends of thought have grown out of situations and have in turn helped to mould the course of our history. The student should gain an appreciation for the American contribution to world culture, and an examination is made of stereotypes which exist today. The discourses of important American thinkers, are considered including Mather, Paine, Jefferson, Emerson, Thoreau, and Veblen.

Soc. St. 477. Rural Sociology

Cr: 2 s.hrs.

During this course the student comes face to face with rural life in northern New Jersey. Social processes and problems are considered. Opportunities are provided for students to attend Grange meetings, county fairs, rural dances and parties, and to live for a day or two with a farm family.

Soc. St. 480. Social History of the United States

Cr: 2 s.hrs.

This course presents a study of the social and cultural aspects of American history. As such, it supplements but does not take the

place of economic and political history. The course considers population movements and growth, rural and urban social problems, status of women, family life, utopian ventures, mass media of communication, amusements and recreation, and human rights.

Soc. St. 482. Conservation and Rural Economic Life Cr: 2 s.hrs.

A study of one of the basic economic problems in America today, land use, farm loans, price support of farm products, increased acreage production, conservation practices, are among the topics studied to give the student a better understanding of the relationship between rural and urban living. Trips are arranged to farms, dairy cooperatives, farm bureaus, banks, and town meetings.

Soc. St. 483. Modern Approaches to Social Problems Cr: 2 s.hrs.

This course is designed to acquaint students with techniques and practices developed for a scientific approach to problems of human relationship. Techniques to be studied include: sampling techniques for testing large groups, questionnaires, interviewing techniques, objective observation of culture patterns, objective observation in controlled laboratory situations, sociometrics, role-playing techniques, attitude testing, and use of semantic analysis in test construction. Students become acquainted with these techniques through the study of a variety of recent reports. The selection of items to be studied depends on the needs and interests of class members. This course is designed to aid in the development of attitudes and practices which make possible the use of a modern, scientific approach to social problems. Prerequisite: An introductory course in anthropology, sociology or special permission of the instructor.

Soc. St. 484. Gulf Coast and Lower Mississippi Valley Cr: 2 s.hrs.

This is a field study covering the Gulf Coast from Mobile to New Orleans. It surveys economic, geographic, and historical aspects of the lower Mississippi Valley. Some places visited are Mobile, Biloxi, New Orleans, Baton Rouge, Natchez, Vicksburg, and Jackson.

Soc. St. 485. Maritime Provinces of Canada Cr: 3 s.hrs.

This is a twenty-one day field study covering Nova Scotia, Cape Breton Island, New Brunswick, and the Gaspé. The route runs through Vermont and Quebec to the Gaspé. It covers Nova Scotia and Cape Breton Island, including the Cabot Trail, and returns through Maine, New Hampshire, Massachusetts, and Connecticut. Among places visited and topics studied are: Rivière du Loup; picturesque fishing villages along the River and Gulf of St. Lawrence; lumbering and pulpwood operations; Gaspé; Percé with its bird sanctuary; Moncton, New Brunswick, with its tidal bore; St. John, New Brunswick, with its reversing falls; Truro; Digby; Grand Pré; Annapolis Royal, Lunenburg; Halifax; Sydney; Louisburg; Cape Breton Highlands, National Park. The history of the conflicts be-

THE CURRICULA

tween the French and the English for this territory, geographical and scenic phenomena, and customs and daily life of French Canadian and English-speaking people of the region are observed.

Soc. St. 488. Hawaii

Cr: 3 s.hrs.

This is a twenty-day field-study course devoted to a study of our fiftieth state. It covers the islands of Oahu, Hawaii, Maui, and Kauai and investigates all of the major geographic, historic, economic, and cultural features of the islands. Among the high points are Honolulu and its environs including Pearl Harbor; the pineapple, sugar cane, and papaya plantations of Oahu as well as the villages, mountain terrain, architecture, and historic spots; the Kona coast, the city of Hilo, the Kilauea crater and lava flows, the steam vents and sulphur banks, and the tree fern forests; the volcanic phenomena of the island of Maui and the canyons, caves and geysers of Kauai as well as the rice paddies. There are visits to schools and public buildings and opportunities to meet people of all classes.

Soc. St. 492A and B. Studies in American Life—The East and the West

Cr: 2 s.hrs. each

These courses comprise a unit to give the student an understanding of the United States as a cultural, historic, geographic, economic, social and political unit and, at the same time, an appreciation of regional differences which characterize American unity and diversity. The geography, history, literature, art, music, architecture, people, manners, customs, flora and fauna, economic, social, and political problems, and significant personalities of the regions are discussed and illustrated with slides, films and other audio-visual materials. Either course may be taken without the other.

The subject matter of SOCIAL STUDIES 492A covers New England, the Central East, the South, and the Middle West east of the Mississippi River. The subject matter of SOCIAL STUDIES 492B deals with the regions west of the Mississippi.

Soc. St. 493. Western Europe Since World War I

Cr: 2 s.hrs.

A study is made primarily of social, economic and political conditions and trends in the principal European states. For the inter-war period, following an analysis of the work of the Paris Peace Conference, emphasis centers upon the failure of the Weimar Republic and the rise to power of Hitler in Germany, the emergence of fascism in Italy, problems of the Third French Republic, and British experiments with socialism. The events leading to World War II are examined, and the significance for Europe of the war and of Allied wartime conferences is noted. For the post-1945 period, special attention is given to the movement towards political and economic integration of European states.

Soc. St. 494. Social Studies and Conservation

Cr: 2 s.hrs.

Everyday problems of living as they are related to and affected

by the wise use of our natural resources are studied in this course. The student learns about the renewable resources, soil, water, forests, and wildlife, as well as the non-renewable resources, minerals, oil and coal. Economic, social, community, national, and individual problems are approached by giving the student firsthand experiences gained through extensive field trips in northern New Jersey. This course is of particular interest to social studies and elementary school teachers but also forms an excellent experience background for all educational fields. Methods of teaching, courses of study, and teaching units are developed.

THE DEPARTMENT OF SPEECH

Fox (*Chairman*), Ballare, Fanelli, Hanson, Hubschman, Kauffman,
Leight, McElroy, Moll, Scholl

THE SPEECH MAJOR

The Speech Department at Montclair recognizes the contribution of both the speech sciences and the speech arts. Thus, the speech major program prepares the prospective teacher to do speech correction and improvement work with students on all grade levels, and to teach and direct dramatics, public speaking, oral interpretation, and general speech throughout the secondary school. The program meets New Jersey certification requirements in two areas: (1) Teaching the Speech Defective K-12 and (2) Teaching Speech and Dramatics from grades 7 through 12. Clinical membership in the American Speech and Hearing Association may be attained.

Class work is supplemented by field trips, speech surveys in schools in New Jersey communities, laboratory teaching experience with fellow students and children who come to the campus for therapy in the Speech and Hearing Center, and general speech activity of all types. Internship programs in speech and hearing rehabilitation are available through affiliation with Mountainside Hospital, the North Jersey Training School, and other special centers and institutions. Players, a society open to the student body, provides opportunities in the field of dramatics. The Montclair Zeta Chapter of the national speech correction honor society, Sigma Alpha Eta, is one of the country's most active chapters.

THE SPEECH ARTS MINOR

Specialization requirements for the Speech Arts minor are as follows: SPEECH 103, 104, 105A or B, 106, 204, 209, 417, and 456.

Students who complete the Speech Arts minor program are eligible for certification to teach Speech Arts in grades 7-12.

SPEECH ARTS AND SCIENCES MAJOR

FRESHMAN YEAR

<i>Fall Semester</i>		S.H.	<i>Spring Semester</i>		S.H.
Phys. Ed. 100A <i>Physical Ed.</i>			Phys. Ed. 100B <i>Physical Ed.</i>		
<i>Activities</i>	1/2		<i>Activities</i>	1/2	
Soc. St. 100A <i>Dev. of World Civ.</i>	3		Soc. St. 100B <i>Dev. of World Civ.</i>	3	
F.A. 100 <i>Intro. to the Visual Arts</i>	3		Eng. 100C <i>Fund. of Writing</i> ...	3	
Ed. 100 <i>Mental Hyg. & Per. Adj.</i>	2		Music 100 <i>Music Appreciation</i> ..	2	
Speech 103 <i>VOICE & SPEECH</i>			Sci. 100A <i>Physical Science, or</i>		
<i>IMPROVEMENT</i>	3		Sci. 100B <i>Biological Science</i> ..	4	
Speech 105A <i>INTRO. TO DRAM.</i>			Speech 100B <i>INTRO. TO DRAM.</i>		
<i>PROD., A</i>	2		<i>PROD., B</i>	2	
Speech 106 <i>INTRO. TO ORAL</i>			Speech 104 <i>INTRO. TO PHONETICS</i>	3	
<i>INTERPRETATION</i>	2				
		<hr/>			<hr/>
		15 1/2			17 1/2

SOPHOMORE YEAR

Phys. Ed. 200A <i>Physical Ed.</i>			Phys. Ed. 200B <i>Physical Ed.</i>		
<i>Activities</i>	1/2		<i>Activities</i>	1/2	
Soc. St. 200A <i>Contemp. Am. Life</i>	3		Soc. St. 200B <i>Contemp. Am. Life</i>	3	
Ed. 201 <i>Human Dev. & Behavior</i>	3		Ed. 202 <i>Human Dev. & Behavior</i>	3	
Sci. 100C <i>Earth Science</i>	2		Elective (Free)	4	
H. E. 100 <i>Healthful Living</i>	2		Speech 204 <i>INTRO. TO PUBLIC</i>		
Elective (Free)	3		<i>SPEAKING</i>	2	
Speech 208 <i>ANATOMY & PHYSIOLOGY OF VOCAL & AUDITORY MECHANISM</i>	3		Speech 209 <i>SPEECH CORRECTION</i> ..	3	
		<hr/>			<hr/>
		16 1/2			15 1/2

JUNIOR YEAR

Ed. 303 <i>Teacher in School & Community</i>	3		Ed. 304X <i>Prin. & Meth. of Teaching</i>	3	
Math. 300 <i>Social Uses of Math.</i> ..	2		Eng. 100G <i>Western World Lit.</i> ..	3	
Ed. 452 <i>Psychology & Ed. of the Handicapped</i>	3		Humanities Elective	2	
Elective (Free)	3		Speech 461B <i>PRACTICUM IN SPEECH CORRECTION</i>	2	
Speech 410 <i>SPEECH PATHOLOGY</i> ..	3		Speech 456 <i>PLAY DIRECTION</i>	3	
Speech 461A <i>PRACTICUM IN SPEECH CORRECTION</i>	2		Speech 468 <i>MEASUREMENT OF HEARING</i>	3	
		<hr/>			<hr/>
		16			16

SENIOR YEAR

Ed. 401 <i>Dev. of Ed. Thought</i> ...	3		Ed. 403 <i>Student Teaching</i>	8	
Lang. 300 <i>Found. of Language</i> ...	2		Elective (<i>Math. or Science</i>) ...	2	
Math. 400 <i>Elem. of Statistical Reasoning</i>	2		Elective (Free)	2	
Speech 417 <i>METH. OF TEACHING SPEECH ARTS</i>	3		Speech <i>ELEM. SCHOOL SPEECH PROGRAMS</i>	2	
Speech 462 <i>GROUP DISCUSSION AND DEBATE</i>	3		Speech <i>Elective</i>	2	
Speech 412 <i>SPEECH DIAGNOSIS</i> ..	2				
		<hr/>			<hr/>
		15			16

Total: 128 semester-hours

Transfer students should confer with the Chairman of the Speech Department regarding courses taken elsewhere which can be accepted as fulfilling any of the above requirements.

THE CURRICULA

Recommended Sequence for Limited Specialization

Speech 105 A or B Introduction to Dramatic Production ..	2
Speech 104 Introduction to Phonetics	3
Speech 209 Speech Correction: Theories and Practices	3
Speech 204 Introduction to Public Speaking	2
Total	10

DEPARTMENTAL COURSE OFFERINGS

Speech 100D. Fundamentals of Speech **Cr: 3 s.hrs.**

For a description of this course, see page 55.

Speech 103. Voice and Speech Improvement **Cr: 3 s.hrs.**

This course affords an opportunity for the students to develop their own voice and speech techniques and to eliminate faults. Consideration is also given to the procedures used in helping others to improve voice and speech patterns.

Speech 104. Introduction to Phonetics **Cr: 3 s.hrs.**

This course gives students an acquaintance with the science of speech sounds. They learn to use the International Phonetic Alphabet and diacritical marks of lexicographers. Symbols are used both in transcribing speech and reading aloud from transcriptions.

Speech 105A and 105B. Introduction to Dramatic Production
Cr: 2 s.hrs. each

These courses are designed for speech majors and others who want to have a general knowledge of various aspects of producing plays. The work of the first semester is devoted to the technical aspects in the production of a play; the work of the second semester covers the problems of the performer in a play. During the first half of the course topics covered are theater structure; the business side of production; the technical problems of scenery, lighting, properties, and costuming. At the conclusion of the first semester the students make practical use of the material by handling the stage management of the one-act plays being produced by students in the course in play direction. The second semester covers beginning problems and techniques of acting and a concentrated study of make-up. The work is concluded by a performance of a scene or character rehearsed in class and made up by the performer for his final demonstration.

Speech 106. Introduction to Oral Interpretation **Cr: 2 s.hrs.**

This course is organized to increase the student's appreciation of literature in the area of his special interest. The emphasis is on individual classroom performances followed by informal critiques, and the development of a repertory for specific classroom purposes.

Speech 204. Introduction to Public Speaking **Cr: 2 s.hrs.**

The student studies techniques for preparing and delivering effective

tive informative, persuasive, and entertaining speeches. He is given several opportunities to address the class and enter into formal critiques, as well as moderate one program.

Speech 208. Anatomy and Physiology of the Vocal and Auditory Mechanisms

Cr: 3 s.hrs.

This course presents a study of the structures of the vocal and auditory mechanisms and of their functioning in producing speech sound and in detecting sound. Consideration is given to the fundamental principles of the physics of sound.

Speech 209. Speech Correction: Theories and Practices

Cr: 3 s.hrs.

This course presents an introduction to the area of speech development and correction, with emphasis on voice and speech problems commonly found in children at the nursery, elementary and secondary-school levels. Consideration is given to the following: (1) subject-matter; (2) diagnostic, remedial, and evaluative techniques; (3) testing and practice materials. Demonstrations with children who have faulty patterns of speech or whose speech development has been retarded are provided.

Speech 410. Speech Pathology

Cr: 2 s.hrs.

This course presents a study of the etiology and pathology of major language and speech disorders which may result from organic, functional, or emotional disturbances, including severe stuttering, dysphonia, laryngectomy, cleft-palate, cerebral palsy, and aphasia. Emphasis is placed upon diagnosis, evaluation, and rehabilitation.

Speech 411. Advanced Speech Pathology

Cr: 3 s.hrs.

The purpose of the course is to provide further study and evaluation of modern techniques of speech rehabilitation, and to review research findings in the areas of voice, articulation, rhythm, and symbolization disorders. Consideration is given to the ways in which speech rehabilitation may be integrated with related health services and educational services in schools and special centers. Prerequisite: SPEECH 410 or equivalent.

Speech 412. Speech Diagnosis

Cr: 3 s.hrs.

The purpose of this course is to analyze and evaluate popularly employed techniques of speech diagnosis. Commercially available diagnostic tools, as well as tests that may be designed by the therapist to meet specific needs are discussed. Consideration is also given to the dynamics of interviewing and to the reporting and interpreting of client histories. Specific methodology to be used in providing speech rehabilitation services to children and adults with speech and language disorders is evolved.

Speech 417. Methods in the Teaching of Speech and Dramatics

Cr: 3 s.hrs.

A study is made of the objectives of speech education at each

THE CURRICULA

grade level; of approaches, problems, materials, textbooks, and techniques in specific speech areas; of modern trends in instruction, and of the integration of speech with other academic fields.

Speech 435. Stagecraft

Cr: 2 s.hrs.

This workshop course provides training in constructing and painting of scenery, and lighting the stage. A minimum of twelve clock hours in the scene shop is required.

Speech 436. Fundamentals of Stage Lighting

Cr: 3 s.hrs.

The purpose is to analyze the functions of light on a stage and to study and use the instruments available to achieve desired effects. Optimum and minimum equipment are studied. The laboratory work is done in the Memorial Auditorium at the College, which houses modern and flexible stage lighting equipment, and in a small auditorium with limited facilities. Students are encouraged to apply the principles of stage lighting to the specific auditoriums in which they may work. Appropriateness of lighting for different types of stage activities is a fundamental consideration in the course. Prerequisite: SPEECH 105A or SPEECH 435 or permission of the instructor.

Speech 437A. Dramatic Production Workshop

Cr: 2 s.hrs.

This course is designed for those students desiring a comprehensive introduction course in theater production. Students participate as junior members of the summer-theater company. They place special emphasis upon stagecraft and lighting, or acting. In addition, they participate in the costuming, make-up, and house-management activities. The course may be used as partial fulfillment of the requirements of the undergraduate speech major or minor, or as a prerequisite to matriculation for the Master's degree in speech.

Speech 437B. Advanced Dramatic Production Workshop

Cr: 2s.hrs.

This course is a continuation of SPEECH 437A.

Speech 438. Creative Dramatics

Cr: 2 s.hrs.

The purpose of this course is to study the principles and techniques of creative dramatics as they may be applied in the classroom, theater, and speech therapy program. Major emphasis is placed on materials for dramatization paralleling the mental, physical, and emotional levels of children in grades kindergarten through eight. Application of these techniques with high school students is also considered. The philosophy of creativity is discussed, and attention is given to the integration of the arts in the total educational picture. Student participation in planning and presenting demonstrations with children is an essential part of the course.

Speech 439. Workshop in Speech Correction

This course is especially designed for students who wish to fulfill

certification requirements to teach children with speech disorders or for graduate students needing to fulfill prerequisites for matriculation for the Master's degree in speech. Specialized areas in the speech sciences are offered on a workshop basis requiring attendance during all or part of the six-week summer session, depending upon the number of units elected.

Speech 439A. Phonetics

Cr: 2 s.hrs.

An intensive study is made of the manner and place of articulation of sounds heard in American English. Skill is developed in using the International Phonetic Alphabet to transcribe speech both prescriptively and descriptively, from live and recorded voices. Consideration is also given to the intonation and stress patterns of spoken English.

Speech 439B. Anatomy and Physiology of the Auditory and Vocal Mechanisms

Cr: 2 s.hrs.

The work of this course entails a detailed study of the larynx and ear as they function in the production and reception of speech. Consideration is also given to the physics of sound and to the structure and functioning of the nervous system.

Speech 439C. Speech Pathology

Cr: 3 s.hrs.

The purpose of this course is to present a comprehensive analysis of the major pathologies of articulation, voice, rhythm, and symbolization. The etiology and treatment of severe stuttering, aphasia, cerebral palsy, and the dysphonias are discussed.

Speech 439D. Practicum in Speech Correction

Cr: 1 s.hr.

Speech 439 E. Advanced Practicum in Speech Correction

Cr: 1 s.hr.

Students are required to spend forty-five clock hours in the Speech and Hearing Center for each semester-hour of credit in order to gain experience in planning and carrying out programs in therapy with children who have speech and hearing problems. Written observation reports, lesson plans, and progress reports are required. Students also participate in staff conferences and meetings with parents of children enrolled for speech therapy. Practicum hours may also be arranged at local speech centers and hospital units.

Speech 439F. Voice Disorders

Cr: 2 s.hrs.

The purpose of the course is to study selected disorders of voice production. Consideration is given to etiology, pathology, and therapy related to vocal nodules, contact ulcers, paralysis of the vocal cords, and other organic voice problems. Speech rehabilitation techniques for the laryngectomized, and persons with cleft palate conditions are also discussed.

Speech 449. Advanced Public Speaking

Cr: 2 s.hrs.

This is an advanced course in the theory and practice of public

THE CURRICULA

speaking. It provides opportunity for training in more complex speech skills, especially in leadership in speech situations. Prerequisite: SPEECH 204 or the equivalent.

Speech 454. Training the Speaking Voice **Cr: 2 s.hrs.**

This is a course in the study of the problems of speech, the development of a pleasant speaking voice with precision in diction, and the application of speech skills to practical speaking situations.

Speech 461C. Advanced Practicum in Speech and Hearing **Cr: 2 s.hrs.**

This course provides further opportunities to apply techniques of speech and hearing rehabilitation under supervision in a laboratory setting. Students are required to: (1) administer audio-metric tests and speech diagnostic examinations; (2) work with parents of children who have speech disorders; and (3) assist the beginning student-speech therapist in planning and carrying out therapy sessions. Prerequisites: SPEECH 461A and B.

Speech 463. Audio-Visual Aids in Teaching Speech **Cr: 2 s.hrs.**

The aim is to equip prospective teachers to understand the desirable characteristics; capabilities; and all possible uses of charts, models, projection equipment, and magnetic and disc recorders available for the teaching of speech. The distribution, cost, operation, servicing, and storing of instruments and supplies are considered.

Speech 464. Psychology of Oral Communication **Cr: 2 s.hrs.**

This course deals with the development of speech and language in the individual, and the problems of communication that lead to confusion of meaning and misunderstanding. Consideration is given to the psychology of persons who are handicapped in speech, hearing, and/or reading, including hysterical or psychogenic impairments. The contributions of learning theory, psychoanalytic theory, and semantics to the field of communication are studied.

Speech 465. Speech Arts Activity **Cr: 1 s.hr.**

Credit is given for some supervised speech-arts activity, such as: playing a major role in a major production; directing a three-act play or its equivalent; giving a public play reading or lecture recital; directing a series of assembly programs; or directing and producing a series of radio programs.

Speech 466. Speech Development: Improvement and Reeducation **Cr: 2 s.hrs.**

This course is intended for superintendents, principals, and classroom teachers who have little or no background in speech education. Consideration is given to the following topics: (1) speech development; (2) speech difficulties or problems found on the kindergarten,

elementary, and secondary-school levels; (3) acquisition of good voice and speech characteristics; (4) use of techniques and materials in classrooms to motivate good speech patterns; and (5) ways of setting up and integrating speech education in school systems. Demonstrations with individuals and groups are made, and students are expected to prepare a practical project.

Speech 467. Oral Interpretation for the Teacher **Cr: 2 s.hrs.**

This course is to help the teacher develop his potentialities in oral reading. Each student is given many opportunities to read aloud and to participate in informal critiques. Assistance is given in compiling a repertoire of selections most useful in daily teaching.

Speech 470. Argumentation and Debate **Cr: 3 s.hrs.**

A study is made in this course of the principles of argumentation including characteristics of propositions, definition of terms, logical organization, evidence, and oral argumentation techniques. Consideration is also given to the organization and coaching of school forensic programs. Practice and experience are afforded the student in argumentation and debate on current, significant issues.

Speech 471. Advanced Acting **Cr: 2 s.hrs.**

Through three areas of activity this course aims to broaden the student's appreciation of the art of acting and to increase his own acting skill. This is accomplished through individual study of established actors and schools of acting, through critiques of current acting as observed by attending professional productions, and mainly through preparation of solo and group acting exercises, both original and from established dramatic literature. As far as possible, attention is paid to the student's future professional use of the material and exercises of the course.

SPEECH 105B, *Introduction to Dramatic Production II*, or its equivalent, with a grade of "B" or better, is prerequisite or the student must obtain permission of the instructor before registering.

Speech 472. Voice Science **Cr: 2 s.hrs.**

The purposes are: (1) to have the student make a careful analysis of his own vocal structure and vocal habits as applied to the basic aspects and factors of sound; (2) to analyze ineffective and effective voice characteristics of pitch, volume, and quality and work for the elimination of unpleasant elements through intensive practice; and (3) to acquire and develop control of a pleasing speaking voice in speaking and oral reading situations. Prerequisite: **SPEECH 100D**.

INDEX

Accreditation	26	Chapin Memorial Fund	46
Adelphes Club Scholarship	47	Citizenship—General	38
Administrative Organization of the College	35-36	College Credits	51
Administrative Officers—College	9	College High School	50-51
Business Division	36	Cosla Collection of Painting	29
Instructional Division	36	Counseling and Advisement— Student	42
Student Personnel Division	36	Course Requirements for A.B. Degree—Summary	49-50
Admissions	30-34	Credits and Standards	51-54
I. Admission to the Freshman Class	30-34	Credits	51
A. Applications	30-31	Rating System	51
B. Entrance Examinations	31	Degree and Certificate	51
C. Academic Requirements for Admission	31-32	Scholastic Standards	52-53
D. Special Requirements for Admission	32-33	Scholastic Honors	53
E. Freshman Honors Sections	33-34	Requirements for Graduation and Bachelor of Arts Degree	53
II. Admission as an Undergraduate Transfer Student	34	Probation	54
III. Admission to the Graduate Division	34	Croce, B., Educational Society	49
Aims and Objectives	25	Curricula—College—Guiding Principles	48-193
Alumni Association	35	Degree and Certificate	51
Andrews, Mark, Scholarship Fund	46	Development Fund at Montclair State College	35
Assembly Programs	40	Directory—Faculty	11-22
Area Maps	2	Full-Time Faculty Members	11-22
Athletics—College	40-41	Health Services	23
Attendance and Absences	42	Library Staff	23
Bureau of Field Studies	36	Drama and Theater Productions	40
Business Education Department	68-79	Education Department	58-67
General Statement	68	General Statement	58-59
Business Education Major	69	Organization and Activities	59-60
Business Education Major— Accounting Sequence	70	Student Teaching	60-61
Business Education Major— Secretarial Studies Sequence	71	Requirements for Assignment to Senior Student Teaching	61
Minors in the Business Education Department	72	Required Courses	61
Secretarial Studies Minor Sequence	72	Departmental Course Offerings	61-67
General Business Minor Sequence	72	Elementary Education Courses	67
Accounting Minor Sequence	73	Employment Service— Part-Time	46-47
Departmental Course Offerings	73-79	English Department	80-85
Calendar	5	General Statement	80
Calendar—College—1963-64	6	English Major Sequence	80-81
		English Minor Requirements	81
		Departmental Course Offerings	81-85
		General Education Courses	81
		Expenses	29-30
		General Expenses for Regular College Year	29

Living Expenses for Regular Year	29-30	Holz, Margaret B., Fund for Student Exchange	46
Refunds	30	Home Economics Department	113-119
Experiment in International Living	47	General Statement	113
Faculty-Student Cooperative Association	30	Home Economics Major Sequence	114
Farrell, Teresa, Scholarship	47	Departmental Course Offerings	115-119
Fields of Instruction	48-49	Honor Societies, Fraternities, Sororities and Clubs	42
Basic and Specialized Professional Education	49	Honors Program	54
General Education	48	Housing Accommodations	41
Specialization	49	Howe, Clarence O. S., Memorial Organ Fund	46
Field Studies Fund	46	Information	10
Financial Aid	44-47	Industrial Arts Department	120-124
Fine Arts Department	86-94	General Statement	120
General Statement	86	Industrial Arts Major Sequence	121
Departmental Course Offerings	86-94	Departmental Course Offerings	122-124
Fine Arts Major Sequence	87	Insurance—Student	43
Foreign Language Department	94-106	Laboratory School	50-51
General Statement	94-95	Library	28-29
Departmental Course Offerings	95-106	Location of College	3
Beginning Languages	95-96	Map—Campus	4
French	96-99	Mathematics Department	125-132
French Major Sequence	96-97	General Statement	125, 127
French Course Offerings	97-99	Mathematics Major Sequence	126
German Minor	99	Departmental Course Offerings	127-132
Latin	100-102	Music and Art	39-40
Latin Major Sequence	100-101	Music Department	133-139
Latin Course Offerings	101-102	General Statement	133
Spanish	103-105	Applied Music	133
Spanish Major Sequence	103	Entrance Requirements in Primary Instruments	133-135
Spanish Course Offerings	104-105	Piano Primary	133-134
Language	106	Voice Primary	134-135
General Education	48-49	Violin Primary	135
General Information	25-42	Clarinet Primary	135
Geography Department	107-112	Cornet-Trumpet Primary	135
General Statement	107	Entrance Requirements in Piano, Secondary Instrument	136
General Education Course	107	Student Teaching	136-137
Geography Minor Sequence	107	Entrance Requirements for Student Teaching	136-137
Departmental Course Offerings	107-112	For Junior Student Teaching	136-137
Gifts	30	For Senior Student Teaching	137
Graduate Division	37	Ensemble	137
Grounds and Buildings	27-28	Recitals	137
Guaranteed Bank Loan	45		
Health Services	43		
Health Staff	23		
History of Montclair State College	26-27		

INDEX

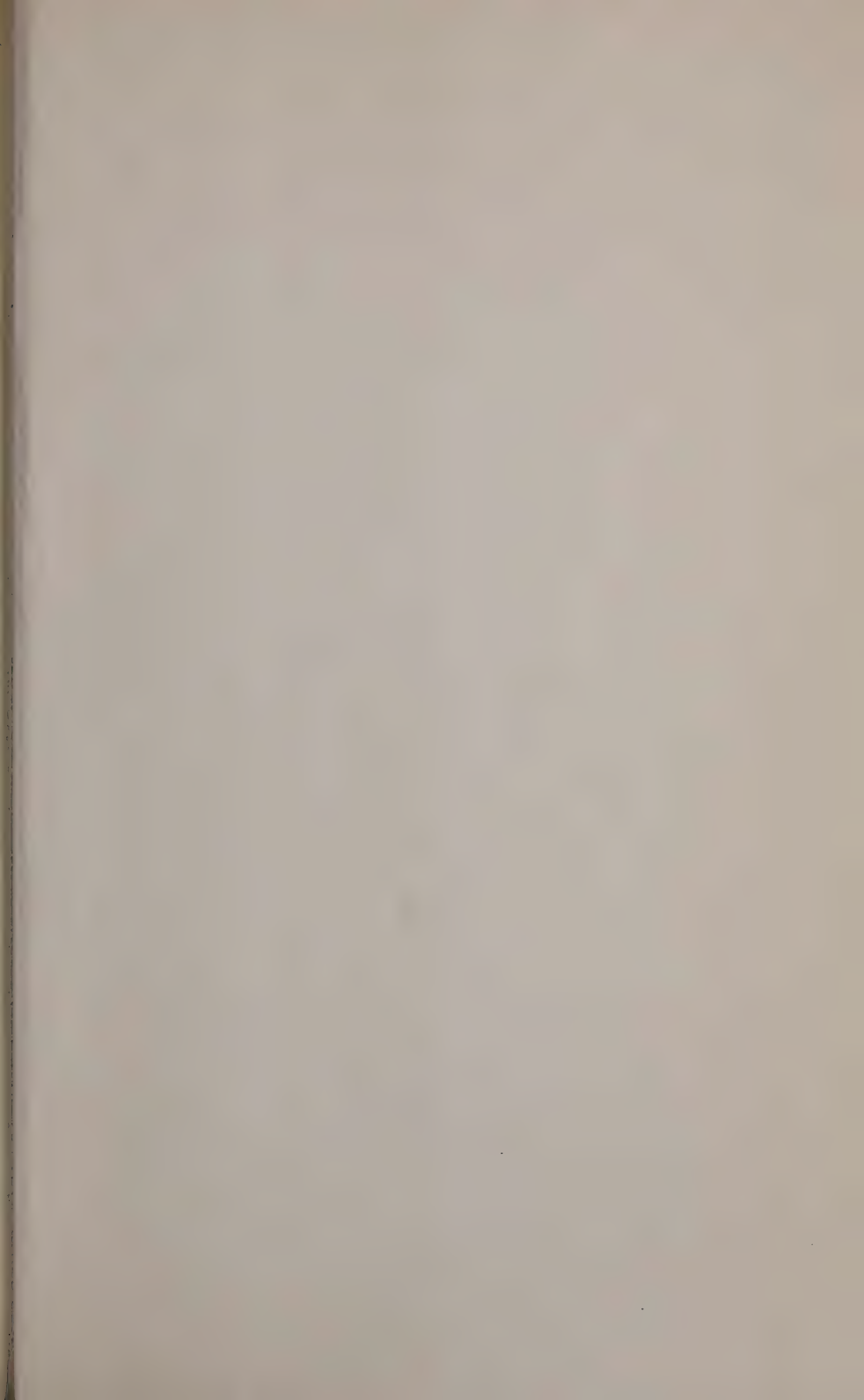
Music for the General Student	137, 139	General Education	54
Music Major Sequence	138	Group I—Social Studies	55
Pipe Organ	139	Group II—Humanities	55-56
Instrument Rental	139	Group III—Science and Mathematics	56-57
Departmental Course Offerings	139-145	Group IV—Mental and Physical Health	57-58
National Defense Student Loan Program	45-46	Publications—Student	41
New Jersey Bell Telephone Company Scholarships	46	Rating System	51
New Jersey State School of Conservation	36-37	Requirements for Graduation and Bachelor of Arts Degree	53
Offerings for Teachers-in-Service	37-38	Russ, Edward, Scholarship Fund	46
Part-Time and Extension Courses	37	Scholarship and Loans	44-47
Summer Session	37-38	Scholastic Honors	53-54
Orientation of New Students	38-39	Scholastic Standards	52-53
Panzer School of Physical Education and Hygiene	146-156	Science Department	157-172
History	146	General Statement	157
Objectives	146-147	Science Major Sequence—Specialization in Biology	158
Admission Requirements	147	Science Major Sequence—Specialization in Physical Science	159
Gymnasium Costumes	147	Science Major—Elective Program in the Earth Sciences	160
Club and Team Requirement	147	Observation Requirements	160
Camping Requirement	148	Minors in Science	160
College Athletics and Men's Intramurals	148	Biological Science Minor	160
Women's Recreation Association	148	Physical Science Minor	160
Health and Physical Education Major	148	Departmental Course Offerings	160-172
Physical Education Major Sequence—Men	149	Science Courses	160-162
Physical Education Major Sequence—Women	150	Biology Courses	162-165
Departmental Course Offerings	151-156	Chemistry Courses	165-168
Health Education Courses	151-152	Physics Courses	168-171
Physical Education Courses	152-156	Courses Offered at the New Jersey State School of Conservation	171-172
Panzer School of Physical Education Scholarships	47	Secretarial and Clerical Assistants	23-24
Parking	43-44	Administration	23
Part-Time and Extension Courses	37	Student Personnel	23
Phi Eta Sigma Scholarship	47	Business Office and General Clerical	23
Philosophy of College	25-26	Registrar's Office	24
Placement Service	35	Part-Time, Extension, and Graduate Office	24
Probation	54	Audio-Visual Department	24
Professional Background Courses	54-58	Student Teaching and Placement	24
		Instructional Departments	24
		Faculty-Student Cooperative Association, Inc.	24

Social Activities	41	Commissioner of Education	9
Social Studies Department	173-185	Director of Teacher Education and Certification	9
General Statement	173	State Board of Education	9
Social Studies Major Sequence	174	State Scholarships	44-45
Minors in the Field of the Social Studies	175	Stone, John C., Scholarship	46
Departmental Course Offerings	175-185	Student Counseling and Advisement	42
Speech Department	186-193	Student Exchange with French and Spanish Speaking Countries	40
General Statement	186	Student Government Association	38
Speech Arts Minor	186	Student Personnel and Activities	38-47
Sequence of Courses in Speech Major	187	Student Personnel Division	42
Recommended Sequence for Limited Specialization	188	Student Personnel Services	42
Departmental Course Offerings	188-193	Student Work Program	45
State Officials	9	Summer Session	37-38
Assistant Commissioner for Higher Education	9	Veterans Counseling	42-43
		Waterman, Judge Esther, Scholarship	47
		Who's Who in American Universities and Colleges	42

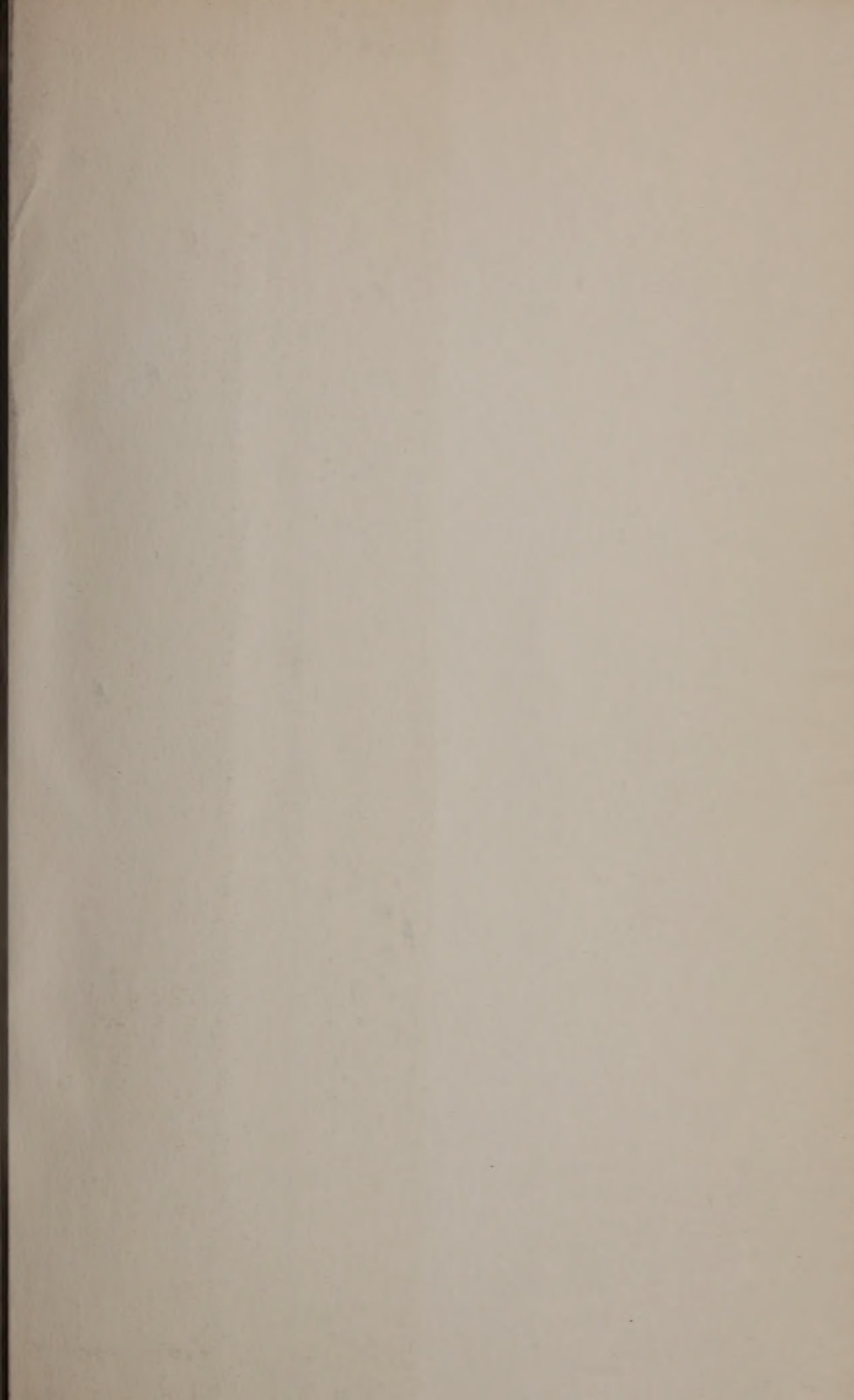
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